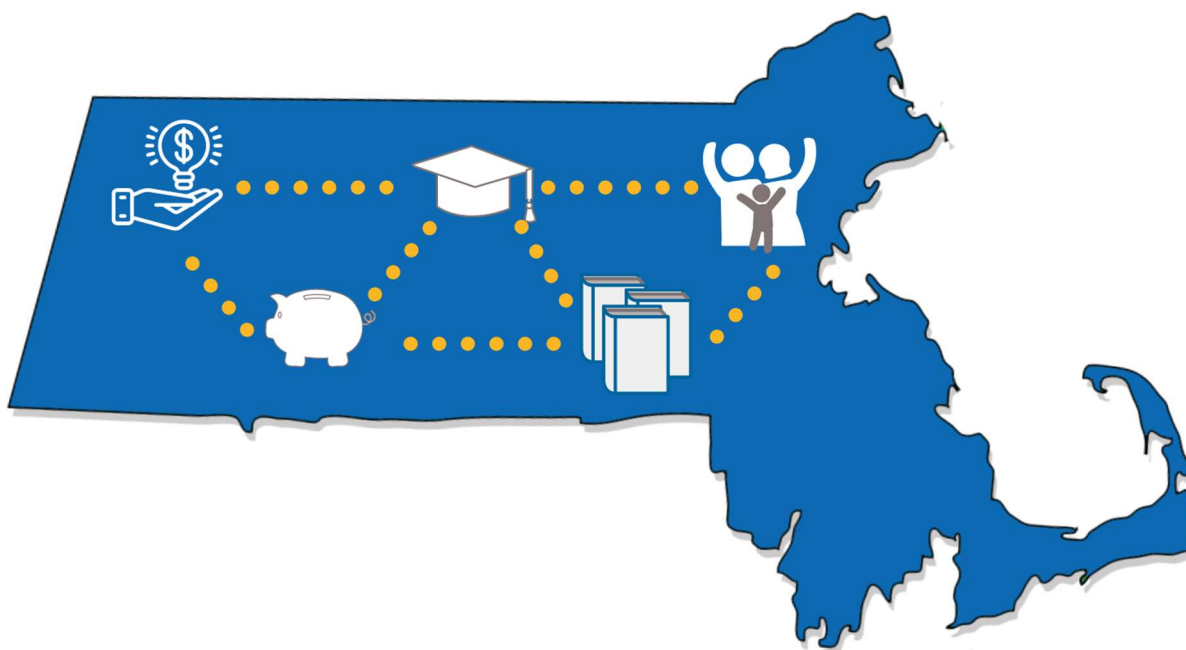


PERSONAL FINANCIAL LITERACY EDUCATION IN THE MASSACHUSETTS PUBLIC SCHOOL SYSTEM

2021



OFFICE OF
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EMPOWERMENT**
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A. Background

This report reviews the state of personal financial education in the Massachusetts public school system.

In recent years, the concept of personal financial literacy has gained prominence in the United States and around the world. Recognition of the increasing levels of knowledge and skill required to successfully navigate the financial system has prompted an introduction of numerous policy initiatives which intend to address deficiencies in financial literacy (U.S. Financial Literacy and Education Commission, 2020; Federal Reserve Financial Education Initiatives, n.d.; Pelletier. 2017).

Definitions for key terms such as ‘personal financial literacy’, ‘financial literacy’, and ‘financial well-being’ tend to vary between individual initiatives, however, the general idea of these terms tends to be similar.

In the Report on Financial Literacy prepared by the Massachusetts Financial Literacy Task Force, **financial literacy** is defined as *“the knowledge and understanding of financial concepts and risks,”* and **financial well-being** is defined as *“the state of having wherein a person can fully meet current and ongoing obligations, can feel secure in their financial future, and is able to make choices that allow enjoyment of life”* (Financial literacy Task Force (2015) p. 17). Similarly, the Organization for Economic Co-operation and Development (“**OECD**”) defines **financial literacy** as *“a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being”* (OECS (2017), p. 13). The President’s Advisory Council on Financial Capability, however, is concerned with **financial capability**, a concept that in addition to knowledge and skills, includes access to resources as basis to the actual *“capacity, ... to manage financial resources effectively”* (Exec. Order No. 13530, 2010. See also Financial Literacy and Education Commission, 2020).

In this report, the term **personal financial literacy (PFL)** is used, as we are focusing on training and education. The term ‘*personal*’ indicates the distinction between financial topics and concepts that relate to the individual as opposed to financial topics and concepts relating to businesses and corporations. As will be demonstrated in the report, this distinction is highly relevant in the context of the secondary school curriculum.

Personal Financial Literacy Topics

The common core topics of PFL include spending/budgeting, long-term saving, understanding credit, and financial protection (see for example, My Money Five, n.d.).

Spending/Budgeting covers planning for day-to-day expenses, such as food and clothing, as well as larger expenses, such as buying a car. In addition, the budgeting component will often discuss the need and mechanics of setting aside money for short-term or long-term savings. Learning about budgeting encourages positive financial planning behavior and wise spending. Engaging in short-term financial planning also encourages individuals to begin financially planning for the long-term.

Long -Term Saving focuses on saving money for long-term goals, such as paying for college, retirement, or buying a home, through various means, including investing in financial instruments and

other assets, and benefitting from compound interest. These types of savings are also crucial for managing debt, which relates to the next topic – credit.

Understanding Credit covers loans (including credit card purchases) and maintaining a good credit score. These are relevant for proper debt management and bankruptcy prevention.

Finally, **Financial Protection** covers risk management, insurance, and fraud. Teaching consumers to identify and protect themselves from fraud and how to select insurance suitable to their situation can promote greater financial stability.

Depending on the target audience and context, additional topics may be included in PFL programs (e.g., early childhood programs usually cover the concept of money), but most programs will address the core topics detailed above (Council for Economic Education, 2013; Jump\$tart Coalition for Personal Financial Literacy, 2017).

Proficiency in these topics provides the foundation for personal financial literacy. Financial choices faced by consumers are becoming increasingly complex, and more risk is being transferred to the consumer (Financial Literacy and Education Commission, 2016). A life cycle simulation developed by Professors Annamaria Lusardi, Pierr-Carl Mitchell, and Olivia S. Michaud, to analyze the effects of different levels of financial literacy over time, revealed that increases in financial literacy generate significant wealth gains (Lusardi, Mitchell, & Michaud, 2017). The simulation utilized *“an explicit multiperiod theoretical model which [allowed them]...to explore two important questions: (1) What forces shape financial knowledge accumulation over the life cycle?, and (2) How much wealth inequality can be attributable to resulting differences in financial knowledge?”* (p. 2). In addition, the study explored types of consumers and evaluated how investment in financial knowledge benefitted them. Their *“formulation posits that financial knowledge offers higher expected returns though it is costly to acquire and depreciates with time”* (p. 31). It was ultimately concluded that financial literacy plays a key role in explaining inequality.

The adverse effects of low financial literacy are not limited to the individual. Ill-informed or ill-advised decisions in any aspect of spending/budgeting, long-term saving, credit and financial protection may also affect third parties, leading to ripple effects throughout the entire market (Lusardi & Mitchell, 2014; Mnuchin & Jovita, 2019). For example, a default on a loan will affect the borrower’s immediate family as well as the lender (Mnuchin & Jovita, 2019). A series of defaults on loans can expose systemic risk underlying financial institutions, communities, and, as was seen in the Great Recession, the entire market (Gerardi, Goette, & Meier, 2013; Mnuchin & Jovita, 2019).

The impact of PFL education

Measurement of personal financial literacy remains a challenge. Across all published works, the metrics used to indicate financial literacy are inconsistent (Brown, Collins, Schmeiser, & Urban, 2014). The variety of approaches used to measure financial literacy leads to discrepancies in the level of personal financial literacy of the general public. In its final report, the President’s Advisory Council on Financial Capability remarked that there is a lack of research on the effectiveness of financial literacy programs and their impact on behavior (PACFP, 2013).

Significantly, a recent meta-analysis of 76 randomized experiments conducted by Kaiser, Lusardi, Menkhoff & Urban (2020), found financial treatment to have positive effects, on average, on financial knowledge and behavior, with the effect on financial knowledge being slightly higher. The magnitude in treatment effects is comparable to other knowledge and behavioral studies on the effect of education in math, reading, and health. In addition, Kaiser et al. (2020) concluded that there is no sufficient evidence to either support or refute financial education decay over time, leaving room for future studies to investigate how financial education affects knowledge and behavior in the long run.

Personal financial literacy in youth

Although it may seem that personal finance is a worry reserved for adults, teenagers as young as seventeen are required to make important financial decisions, most notably relating to their post-secondary education. According to the OECD, 62% of US bachelor's degree students will hold public student loan debt upon graduation (OECD, 2019). All the while, students face immense uncertainty regarding employment and wages after graduation. It is, therefore, imperative to equip young adults with the necessary tools to make informed decisions that will not hinder them financially in the future.

Numerous reports warn of the financial literacy deficiencies of youth and young adults in the US despite the fact that many face significant financial decisions. In 2016, the Financial Industry Regulatory Authority (FINRA) examined the financial behavior of American adults and found that those between the ages of 18 and 34 engaged in the worst financial behavior (Bumcrot, Ulicny, Lusardi, Mottola, Kieffer, & Walsh, 2016). Individuals in that age bracket also scored lowest in financial knowledge. They concluded that younger respondents were more likely to use costly borrowing methods and that nearly half of the 18-34-year-old age bracket had student loan debt.

Student debt and decisions made around incurring debt can have long lasting and sometimes devastating effects. The FINRA study found that nearly 30% of those who took out loans to fund their post-secondary education did not finish their educational program, and many of those in the youngest age bracket felt overly burdened by their debt (Bumcrot et. Al, 2016). While student debt is usually considered to be “good debt” that will increase income in the long run (Chopra, 2013), data from the FINRA study points out that, for a large portion of the population, the debt they incur at a young age actually hinders their financial futures. Improving the capability of high school students to utilize available financing options effectively and to make informed and realistic decisions related to student loans may help in reducing the rate of “bad” student debt.

Personal financial literacy is not uniform among students from different racial and ethnic backgrounds, making the need to provide quality PFL education an equity issue. Results from the OECD's 2012 International assessment – PISA,¹ for 15-year-olds in the US indicate that there is an extensive gap in PFL performance between differing socio-economic and ethnic groups (OECD, 2014). Based on the 2015 PISA financial literacy scale, there is evidence of disparities in financial literacy proficiency between ethnicities within Massachusetts (National Center for Education Statistics, 2015). Results of the PISA Financial Literacy study presented in National Center for Education Statistics (2015) show that in Masschusetts, 32.5% of African American students and 29.1% of Hispanic students scored below a level

¹ Programme for International Student Assessment.

of 2 in financial literacy proficiency, compared to only 6.9% of white students. Meanwhile, in the top percentile, 29.1% of white students compared to 16.4 % of African American students and 13.8% of Hispanic students reached the level 4 proficiency. On average African American and Hispanic students scored a level 3 or below in financial literacy proficiency, while white students on average scored a level 3 or above.

Studies indicate that exposure to financial behavior and skills while in school can start as early as elementary school and can improve students' finances throughout their lives (Consumer Financial Protection Bureau, 2019a; OECD, 2019). While the Consumer Financial Protection Bureau ("CFPB") acknowledges that there needs to be further research into the effects of teaching financial literacy in grades K-8, it does recommend that financial literacy be taught to children while they are young and first developing executive function, citing a finding that children are capable of saving by age five or six (Consumer Financial Protection Bureau, 2016). Personal financial literacy intervention at the early stages of education can be highly effective in building the framework for positive financial behaviors and attitudes later in life (OECD, 2019).

With respect to PFL education in high schools, numerous studies have found that improved financial education in high school can positively impact a young adult's financial performance within society (Brown, Collins, Schmeiser, & Urban (2014); Urban, Schmeiser, Collins, & Brown (2018); and Stoddard & Urban (2019); Consumer Financial Protection Bureau, 2019a). Urban et al (2018) found that financial education requirements in high school had a positive effect on the credit report outcomes of young adults between the ages of 18 and 21 by increasing credit scores and decreasing delinquencies. Brown et al (2014) found similar results with a decreased likelihood of default, decreased non-student debt, and increased likelihood of having a credit file. Stoddard & Urban (2019) found financial education to have a positive effect on student aid decisions of first semester college students, resulting in a utilization of lower interest loans and a decrease in defaults on non-student debt. All of the studies found the positive effect of financial education in high school to be statistically significant. Finally, as previously mentioned, in reviewing a significant number of studies into the impact of PFL education, Kaiser et al. (2020) found financial education to have an overall positive effect on financial knowledge and behavior.

Despite the importance of starting early, many students do not enjoy systematic PFL education throughout their years in school. While almost all states in the US have adopted personal finance into their K-12 standards, less than half of the states (24) require a personal finance course to be offered to high school students and only 15 states require students to go through some PFL education to graduate (Council for Economic Education, 2020). Of those, only 6 require the course to be taken standalone (Council for Economic Education, 2020).

In her recent study of PFL education in high schools, Professor Carly Urban from Montana State University provides insights into the factors that affect the provision of PFL education in high schools (Urban, 2020). Using hand-collected data from 7,611 public high schools, Urban looked at the correlation between different variables and the existence of PFL education. The study found that having a low teacher-student ratio is correlated with a school having a financial literacy course requirement or offering. Yet, subsequent predictive models show minimal correlation between income level and the

probability of offering a stand-alone financial literacy requirement. A \$1,000 increase in median family income was found to be associated with an 8% increase in the likelihood of offering a stand-alone course. Additional findings correlate higher math test scores with a financial literacy requirement. Finally, Urban noted that schools with stand-alone requirements are more likely to serve student bodies that are not racially diverse (non-Hispanic white students make up 75% of the student body).

Another study that looked at the correlation between PFL education and other characteristics of the student body found that schools with a higher rate of students eligible for free and reduced lunches provide less access to personal finance courses (Council for Economic Education, 2020). Students in such schools are both less likely to have a PFL class offered to them as part of their education and less likely to have a PFL course be a graduation requirement (Council for Economic Education, 2020).

Developments relating to personal financial literacy education in Massachusetts

In the following section we will review the efforts to incorporate PFL education in the Massachusetts public school system.

The Financial literacy pilot program (2013-2015)

Massachusetts' public education system is characterized by strict standards and accountability for student achievement with a high degree of flexibility for the ways in which individual schools meet those standards. In 1993, the Massachusetts Education Reform Act was signed into law, overhauling the state's public education system and providing the basic structure under which schools currently operate (The Department of Elementary and Secondary Education, n.d.(a)). Under this structure, the Department of Elementary and Secondary Education (DESE) sets forth curriculum frameworks that convey the expectations for student learning across various subject areas, which are as follows:²

- Arts
- History and Social Science
- English Language Arts and Literacy ("ELA")
- Mathematics
- Digital Literacy and Computer Science
- Science, Technology, and Engineering
- Vocational Technical Education
- English Language Development
- Comprehensive Health
- Foreign Languages

The curriculum frameworks for ELA, math, and science are tested through the Massachusetts Comprehensive Assessment System ("MCAS"), which are mandatory for grades 3-8 and 10 in all publicly funded schools (The Department of Elementary and Secondary Education, n.d.(b)). MCAS testing is one of the tools the state uses to monitor school and district performance. Chronic underperformance in

² Current curriculum Frameworks can be viewed here: <http://www.doe.mass.edu/frameworks/current.html>.

MCAS, along with other indicators, may lead to state-level intervention in a school or a district (The Department of Elementary and Secondary Education, n.d.(c)).

Apart from having to fulfil the MCAS requirement, districts and schools generally have wide latitude to form and implement specific classroom curriculums as they see fit. Depending on location and subject, curricular decisions may be made at the district-wide level, the school level, or left up to the individual teacher. DESE provides resources and high-level guidance for educators seeking assistance with developing curriculum materials that align with the state-mandated benchmarks.

There are a few exceptions where the state has decided to set mandatory requirements on specific subjects, such as the state law requiring the inclusion of a non-partisan civics project for 8th graders, and the inclusion of physical education as a required subject in schools. For more 'niche' subjects, where there are no state level requirements and no state-wide testing, schools have even more flexibility.

In the past few years, there have been several initiatives to encourage schools in Massachusetts to offer personal financial literacy education to students and to supports schools that do so.

In 2013 DESE launched the Financial Literacy Pilot Program in Massachusetts to support high schools in preparing their students to make personal financial decisions (The Department of Elementary and Secondary Education, 2015). Eleven high schools took part in the pilot, spanning two academic years. The first year of the pilot focused on providing schools with a variety of models to ensure financial literacy education and implementing them. The second year focused on refining the schools' selected programs and scaling them up to reach a larger number of students. High schools had considerable flexibility in choosing which models of implementation to adopt as long as learning outcomes aligned with the *2011 Massachusetts Curriculum Frameworks for Mathematics* and the Economic Education Council's *National Standards for Financial Literacy*. PFL programs included fairs and events, standalone financial literacy courses, and embedded financial literacy topics in existing courses. Recommendations for future financial literacy programs were formulated following the pilot (The Department of Elementary and Secondary Education, 2015). These included –

- PFL curriculum should be comprised of both hands-on activities that engage student participation and practical applications for the content learned.
- Professional development support should be provided to teachers.
- A centralized directory of resources should be created.
- Public-private partnerships between schools and community partners should be fostered to support PFL education.

The evaluation of the pilot program by the UMASS Donahue Institute found that 72% of students demonstrated gains in financial literacy on the pre- and post-assessments. 76% of teacher survey respondents reported that they had observed a moderate to strong improvement in their students' financial decision making. 86% of students reported that they were much or somewhat better able to make informed decisions about their personal finances after participating in their FLP courses (UMASS Donahue Institute, 2015).

In the evaluation, most of the 11 sites reported that aligning their programs with financial literacy standards proved to be easier than aligning programs with other standards; many leaders would have liked to 1) make financial literacy courses or content mandatory for students, and 2) increase professional development so teachers would receive adequate support for their instruction (UMASS Donahue Institute, 2015). Collaborating with community partners and institutions such as the Institute of Higher Education was a useful tool for program implementation, and every site had at least one external partner they collaborated with. Program leaders felt that embedding financial literacy topics into preexisting courses could ensure the sustainability of the financial literacy program (UMASS Donahue Institute, 2015).

The Financial Education Innovation Fund Grant (2015)

In 2015, the Massachusetts State Treasurer's Office of Economic Empowerment (OEE) and the Massachusetts Division of Banks created the Financial Education Innovation Grant Program to fund financial education fairs ("Credit for Life Fairs"). Credit for Life Fairs are experiential learning opportunities that simulate real life career choices and lifestyle decisions, helping participants develop skills in saving, spending, and budgeting. The funding is granted in a competitive process to public high schools that wish to develop or expand existing fairs.

Since the inception of the program, the Financial Education Innovation Fund Grant has funded 210 fairs in 271 schools, serving tens of thousands of students across the Commonwealth.

The 2018 History and Social Science Curriculum Framework

In 2018 DESE published a new History and Social Science curriculum framework to replace the existing framework from 2003. The new curriculum framework added standards for a standalone high school course in personal financial literacy.³ While the course is included in the History and Social Science framework, being a standalone course, it may be incorporated in any other subject at the discretion of local district or school authorities (The Department of Elementary and Secondary Education (2018a), p. 173). As mentioned, although the curriculum framework is not mandatory, it sets the standard for quality education in the state and serves as a guideline for school districts in creating their own curricula.

The Act Relative to Financial Literacy in Schools (2019)

In January 2019, Governor Baker signed into law Chapter 438 of the Acts of 2018, *An act relative to financial literacy in schools*. The act stipulates that the Massachusetts Board of Elementary and Secondary Education may direct DESE to set standards for financial literacy. The Act also requires DESE to "make resources available to school districts, charter schools, approved private day or residential schools, and collaborative schools to assist in the selection of materials and curriculum on personal financial literacy" and to "identify and offer information on resources for professional development activities and instruction on personal financial literacy". Schools may incorporate the financial literacy standards in any subject but are not required to do so.

³ The previous version of the curriculum framework had some reference to PFL topics, particularly in the lower grades.

Pursuant to the Act, DESE supports the implementation of the new curriculum framework by providing a list of curricular resources in its supplement to the 2018 Massachusetts History and Social Science Curriculum Framework (The Department of Elementary and Secondary Education, 2018b). Additionally, beginning in 2020, DESE began providing districts with the Financial Literacy Planning and Implementation Grant. This is a competitive grant designed to support activities related to curriculum development, curriculum implementation, professional development in PFL, or financial literacy experiential learning.⁴ The first round of grants has been awarded in 2020, and a second round of grants is due to be awarded in 2021.

⁴ Further information on the grant is available here: <http://www.doe.mass.edu/grants/2020/104/>

B. Research questions and data collection

Upon entering office in 2015, Treasurer Deborah Goldberg created the Task Force on Financial Literacy to examine the state of financial education in Massachusetts and make recommendations for the necessary actions to enhance financial literacy in the Commonwealth. The Task Force was made up of policymakers, educators, bankers, and advocates. It worked in separate subcommittees, each focused on a key demographic: K-12 students, college students, and adults.

The Task Force submitted its report and recommendations in December 2015 (Financial Literacy Task Force, 2015). The K-12 subcommittee stated its goal that *“every student who graduates from high school in our state should have a foundational knowledge of financial education concepts and have access to high-quality resources. K-12 students must be financially literate to make informed choices to enhance their own – and ultimately their families – financial security and well-being”* (p. 23).

The subcommittee remarked that since Massachusetts does not require schools to offer financial education courses to students, *“the K-12 Subcommittee recommends that OEE partner with a research institution to assess the current level and impact of student access to personal finance instruction in Massachusetts schools”* (p. 20). In addition, the subcommittee recommended the following:

- 1) Develop a method of evaluating the personal finance decision-making, knowledge, skills, confidence, and behavior of Massachusetts K-12 students in order to better assess their financial literacy;
- 2) Collaborate with DESE to connect educators with financial education teacher training and professional development points;
- 3) Encourage public, private, and non-profit entities to share information, participate in events, and support development of programs that promote financial education among K-12 youth; and
- 4) Create mechanisms and incentives for the various providers of K-12 financial education to convene regularly, share best practices, and coordinate their activities for school age youth and their families.

In March 2019 the Economic Empowerment Trust Fund approved a set of recommendations made by the Temporary Committee on Financial Education regarding the promotion of PFL education in K-12 settings. In its recommendations, the Temporary Committee expressed its support to *“the work of OEE to research the financial education programs currently being offered by public schools in Massachusetts”*. In addition, the Temporary Committee encouraged OEE *“to identify opportunities for case studies during this research that can be presented to educators on how to successfully incorporate these topics into the classroom”* as well as to share its *“information with DESE throughout this process”*.

This study is the result of the Financial Literacy Taskforce’s recommendation to assess access to financial education in the K-12 setting in Massachusetts. Its primary aim is to describe PFL education in the public system, assess the attitudes of educators in relation to PFL education, and identify barriers and levers to PFL education in k-12.

The data gathering stage was completed well before the Corona virus outbreak. The huge impact of the pandemic on schools and the education sector is bound to have a significant effect on PFL

education. Yet PFL education continues to have an important role in preparing youth to face the economic challenges of the post-COVID world. We believe, therefore, that this study can serve as a valuable tool for policymakers in promoting PFL education in schools.

We would like to thank all of the educators who took the time to participate in the study and, in particular, the 16 principals, teachers, superintendents, and other administrators who agreed to be interviewed and shared their thoughts and ideas with us. It has been enlightening.

1. Research questions

The Financial Literacy Task Force (2015) pointed out that:

1. Although Massachusetts does not require schools to offer financial education courses to students, *“some schools have elected to provide personal finance courses, and some teachers have also infused personal finance content into their courses”* (p.24).
2. The Task Force did not want to create an unfunded mandate, and therefore the subcommittee focused on the idea of encouraging and enabling school districts to *“integrate financial literacy into their K-12 classrooms”* (p. 21).

In line with the subcommittee’s ground up approach, the first step in implementing the Task Force’s recommendation is to establish a baseline knowledge of the state of financial education in public schools, however, some crucial data is missing. For example, there is no comprehensive database on high schools offering PFL education to students or the topics covered; there is no data on PFL education in grades K through 8; and there is no account of what local educators think of PFL education and what they perceive to be the barriers to the further advancement of PFL education. To address these gaps in relevant data, the study set out to create a baseline of knowledge on these issues, with the intention to inform future policies promoting PFL education at all grade levels.

To that end we defined three research questions:

- **Research question 1:** What personal financial literacy content is taught in Massachusetts public schools?
- **Research question 2:** What shapes personal financial education in public schools in Massachusetts?
- **Research question 3:** What are the perceptions of district, school staff, and teachers of personal financial education in Massachusetts public schools?

We purposefully avoided trying to assess the effectiveness of the various PFL programs offered in the schools. We recognize that impact is a central issue with PFL education, however, the challenges of measuring the impact of PFL education would have shifted our focus away from mapping PFL education in the public-school system.

2. Method

Due to the scope and complexity of the study, we opted for a mixed methods design that includes both quantitative and qualitative research methods and data (Creswell & Creswell, 2017). We utilized two instruments for data collection: surveys and interviews, and we supplemented the data using secondary sources. Surveys and interviews were used to gather data from district and school personnel. The instruments were designed in consultation with DESE. Here is a summary of the methodology used for data collection.

2.1. Data collection from districts and schools

2.1.1. Surveys and interviews

We collected quantitative data from educators using surveys focusing on PFL content and the barriers to PFL education. In our effort to get the complete picture of the PFL content taught in schools and what affects it, we decided to survey both school districts and schools. To address the diversity of our population we designed two different surveys (See full surveys in Appendix A):

1. **Districts survey (sent to superintendents).** This survey focused on school district policies and actions to support PFL education. For example, districts were asked whether they require schools to teach personal financial literacy to all students or to offer it as an elective. We also asked what sort of resources districts provide schools to support teaching PFL (e.g., help establishing relationships with community partners, funding, or teacher training opportunities).
2. **Schools survey (sent to principals).** This version of the survey focused on PFL content taught in schools. Different versions of the survey were sent to high schools and to schools that serve grades K through 8 (referred to here as ‘middle/elementary schools’). The high schools survey asked respondents about courses that are offered to students, topics covered, whether they are standalone or integrated, their scope, and other relevant information. The middle/elementary schools survey asked the same but with regard to grade levels rather than specific courses.

All surveys also included a question about the barriers to personal financial literacy education (e.g., lack of funding or shortage of class time).

Surveys were deployed to a sample of 120 school districts and to the schools that operate in them.⁵ The sample includes the school districts from the 10 largest cities in Massachusetts and an additional 110 randomly selected districts. Altogether, 120 superintendents, 146 high school principals,⁶ and 627 middle/elementary school principals⁷ were asked to complete a survey. We attached an incentive to the surveys sent to schools, so that educators who responded to the survey received a \$10 Amazon gift card after completion. No incentive was offered to district respondents under the assumption that, unlike teachers, districts staff would most likely be able to complete the survey during paid work time.

⁵ Surveys were not sent to 17 schools that serve over 80% disabled students each. We approached these schools with a request to interview principals on the unique aspects of teaching personal financial literacy to students with disabilities but did not manage to get any to respond. Also excluded from the list were schools that serve only PK/K.

⁶ We consider schools that serve any grades from 9 to 12 including those that serve middle grade levels (6 to 8), to be high schools. Seven schools in our sample serve all grades (K-12). In these seven cases principals were sent both versions of the school survey and were encouraged to respond at least to the high school survey.

⁷ In 15 districts in our sample (all of them charter), the superintendent is also principal of the school. In these cases, both the district survey and the school surveys were sent.

To encourage survey response, OEE performed intensive outreach that included emailing reminders to all recipients as well as mailing reminders to superintendents. Additional in person outreach was made to several districts and schools.

The response rate to the surveys was:

1. For districts: 27.5% (33 districts responded)
2. For high schools: 28% (41 high schools responded)⁸
3. For middle/elementary schools: 8.8% (55 middle/elementary schools responded)⁹

We compared the demographic composition of survey respondents to non-respondents with the general sample and found that responding districts were not significantly different from non-responding districts or from our complete sample of school districts. We, therefore, cautiously assume that some general conclusions can be reached from these responses. We could not, however, establish that responding schools, both high schools and middle/elementary schools, are similar enough to non-respondents or to the complete sample. Therefore, we assume that high school and middle/elementary school responses are non-representative of the population of schools in Massachusetts. See full discussion of generalizability in Appendix C.

Survey respondents were invited to participate in in-depth interviews. Respondents who agreed to do so were later contacted to coordinate the interview.

As with the surveys, several different interview guides were prepared depending on the interviewee – district, high school, or elementary school. Also, the interview guides included contingencies dependent on whether or not survey responses indicated the existence of financial education in district/school.

The interviews included three parts (see the full interview guides in Appendix B). The first part explored PFL requirements in the case of district, and the PFL content taught in the case of schools. For school respondents who did not report any PFL education in the survey, we prompted interviewees to consider the possibility that the school did indeed provide PFL education by giving examples for possible courses of programs that may include PFL content.

The second part of the interview explored the factors that hinder or facilitate PFL education at the school level. It also allowed interviewees to express their own opinions on the instruction of PFL and what type of support they would need in order to introduce or expand such education in their district or school.

Finally, the third part focused on the future of PFL education in the school or district.

All in all, 16 interviews were conducted as follows:

1. One interview with a superintendent of a school district that covers grades K to 12.

⁸ We have data for one extra high school, because one of the districts from the sample that originally had only elementary school grades merged with another district that covers middle/elementary school grades.

⁹ There is considerable diversity in the grade levels served by the middle/elementary school sample. Forty respondents are elementary schools (serving grades PK to 6), and only ten respondents are middle schools (grades 6 to 8 only). An additional five respondents have grades of all levels.

2. Four interviews with high school principals or teachers, one which is a vocational technical school.
3. One interview with a principal of a school that serves grades K to 12.
4. Ten interviews with middle or elementary school principals. Seven of these schools serve grades 5 and lower, one serves grades PK to 8 and the final two serve only grades 6 to 8.

2.1.2. Secondary sources on personal financial literacy education

In addition to collecting data directly from stakeholders, we relied on secondary data, both normative and descriptive, of PFL content taught in the Massachusetts public school system.

Curriculum Frameworks and Standards

Several of the current curriculum framework issued by DESE include standards for PFL:

1. The 2018 History and Social Science Curriculum Framework (The Department of Elementary and Secondary Education, 2018a).
2. The 2007 Mathematics Curriculum Framework (The Department of Elementary and Secondary Education, 2017a).
3. Massachusetts Comprehensive Health Curriculum Framework (The Department of Elementary and Secondary Education, 1999).
4. Vocational Technical Education Frameworks.¹⁰
5. Massachusetts Digital Literacy and Computer Science Curriculum Framework (The Department of Elementary and Secondary Education, 2016).

In addition to the Curriculum frameworks, there are a number of PFL standards set by prominent organizations dedicated to improving PFL. The standards indicate the topics and content appropriate to each age or grade level. These standards are informative in defining the scope of PFL education in youth and understanding how to teach it. The following standards are also used by districts and schools when designing their PFL curriculum:

1. Council of Economic Education National Standards for Financial Literacy (Council for Economic Education, 2013).
2. National Standards in K-12 Personal Finance Education by the Jump\$tart Coalition for Personal Financial Literacy (Jump\$tart Coalition for Personal Financial Literacy, 2017).
3. OECD/INFE Core Competencies Framework on Financial Literacy for Youth (OECD, 2015).

Programs of Study

Most high schools publish a program of study or course catalog that includes descriptions of and information on all courses offered to students. To complement survey and interview data, we used high school programs of study as a secondary source for PFL content taught in schools. The use of programs of study to identify PFL education was first employed in 2016 by NextGen Personal Finance (“**NGPF**”) for

¹⁰ Available here: <https://www.doe.mass.edu/ccte/cvte/frameworks/>.

their study of financial education in high schools.¹¹ Since then, NGPF has continually updated their data set of high school PFL courses.¹² More recently, Urban (2020) used programs of study as the main source of data in her study of the likelihood that schools will offer PFL education dependent on different characteristics, such as demographics and school resource.

For our study, we focus on the programs of study of the high schools in our sample. Of the 146 high schools in our sample, we found a program of study for 97 schools (66.4%).¹³ After combining the data we have from survey responses and programs of study, we have information on a total of 108 high schools of the 146 in our sample. Despite having data on the majority of schools in our sample, we have significantly less data on charter high schools and smaller high schools. Our programs of study datasets also under-represent schools with a high rate of Hispanic or African-American students than the full sample of schools.

We found the latest program of study, referring to the 2019-2020 school year, in the majority of cases (63 schools). In the remaining cases, we found earlier programs of study. Table 1 summarizes the programs of study found by year:

Program of study year	Number	%
2019-2020	64	66%
2018-2019	13	13.4%
2017-2018	3	3.1%
2016-2017	4	4.1%
Unknown	13	13.4%

Table 1

When identifying PFL courses, we did not limit ourselves to required or standalone courses. We considered a school to offer some PFL content, even in cases where it is done as an integrated portion of an elective. In deciding what content would be considered “personal financial literacy”, for the purpose of this study, we relied on the topics mentioned in the financial literacy legislation as well as the various financial literacy standards.

PFL content was identified using several search terms and, in a few cases, based on our own judgement of the course description, even if no search term was identified. The search terms we used are listed in Appendix D. We adopted an inclusive approach to encompass the diverse forms that PFL education can take. Because of the study’s in-depth analysis of the PFL topics covered in the courses, we

¹¹ For the latest version of the report see Next Gen Personal Finance (2020).

¹² See: <https://www.ngpf.org/got-finance/>.

¹³ In a few cases, we found that a single program of study applies to more than one school in the district. In these cases, we counted each course that appears in the program of study as two separate courses as they are taught in two different schools. In addition, we identified a single, district-wide, program of study for the school district that operates multiple high schools. We are counting each of the high schools in the districts as having a program of study. However, it is safe to assume that not all high schools offer all courses mentioned in the program of study. Therefore, in counting the courses mentioned in the district-wide program of study we counted each course mentioned only once and added a note indicating it is from the district-wide program of study.

are able to reflect the scope of courses that can be considered at the core of PFL education, and those that are more peripheral. Most of the peripheral courses belong to one of the following categories:

1. **Economics courses** that cover microeconomics. Common examples for microeconomics content related to PFL include supply and demand, scarcity, and economic principles which influence individual choice.
2. **Accounting courses.** ‘Accounting I’ courses include topics that are closely related to PFL, such as accounting records, journals, and balancing business transactions.
3. **Entrepreneurship courses.** Entrepreneurship courses tend to cover, apart from entrepreneurship itself, preparing business plans, capital, and financial plans. These topics appear in some financial literacy standards.

We did not include in our dataset content that related solely to applying for financial aid or loans. While paying for higher education is certainly a PFL topic, we found that lessons or activities around applying for financial aid or loans are less focused on education and more oriented towards practical assistance with procedural aspects of funding college.

Combining survey data with programs of study data

As mentioned before, by combining survey data with the data we gathered from our analysis of programs of study, we have information on taught PFL content in a total of 108 schools (76% of all high schools in our sample). We have both survey data and program of study data for a total of 31 high schools allowing us to identify discrepancies, further adding to the reliability of each data source.

Discrepancies between survey data and data gathered from programs of study were found in almost all cases where both sources of data were available. The discrepancies mostly relate to courses found in programs of study and not mentioned in the surveys (a total of 110 courses). Further, there are thirteen cases where a course mentioned in the survey was not found in its corresponding programs of study.

There are several possible explanations for these discrepancies. The most likely ones are:

1. As a result of our broad scope in analyzing programs of study, our data set includes many courses that have a small proportion dedicated to PFL. Indeed, looking at courses identified in programs of study but not mentioned in the survey, the vast majority of them are not dedicated to PFL. Respondents to our surveys may not have recalled these courses or might have assumed that the survey was only asking about courses which have a high proportion dedicated to PFL topics.
2. Courses mentioned in the surveys may be from a different school year than the programs of study in our dataset.
3. In some cases, survey respondents mentioned courses that were found in the programs of study, but their description did not include PFL topics; therefore, the course was not flagged for our database.
4. Special education courses are both not consistently described in programs of study and not consistently mentioned by survey respondents, resulting in a mismatch in this category.

Because of these discrepancies, we are presenting the survey data separate from the program of study data. The two descriptions should be considered as complementary to each other. In any case, the programs of study dataset should not be considered as an accurate reflection of all PFL content offered in high schools, as it includes programs of study from previous years and relies on a brief description of the course. Rather, it is a good indicator of the trends relating to PFL education.

C. Findings

Research Question 1: What personal financial literacy content is taught in Massachusetts public schools?

Q1.1. State level requirement related to personal financial literacy education

As previously mentioned, the state of Massachusetts does not require schools to teach PFL. However, the state curriculum frameworks include PFL content. These curriculum frameworks are a benchmark for districts as to what is expected of them.

Most notably, the 2018 History and Social Science Curriculum Framework includes standards for a standalone Personal Financial Literacy elective (The Department of Elementary and Secondary Education, 2018a). The Personal Financial Literacy elective includes the following four topics:

1. **Earning and spending income.** This topic also covers employment, taxes, methods of payment, and consumer protection.
2. **Saving Money.** This topic also covers banks and financial institutions, interest (simple and compound), financial regulation, and planning for the future.
3. **Using credit and making investments.**
4. **Protecting and insuring assets.** This topic also covers identity theft and online scams.

The History and Social Science Framework has additional standards for PFL education scattered in other places. For example, the framework for grades 1 and 2 addresses such topics as “Earning an Income” and “Buying Goods and Services”.

Additional curriculum frameworks that include PFL content are: the 2007 Mathematics Curriculum Framework (The Department of Elementary and Secondary Education, 2017a), mostly in grades PK to 2 with the introduction of money, and in middle and high school with the use of interest in various contexts; the Comprehensive Health Curriculum Framework (The Department of Elementary and Secondary Education, 1999), which addresses budgeting in high school; and finally the Vocational Technical Education Frameworks,¹⁴ which address budgeting, income (payroll and deductions), taxes, and entrepreneurship for all career clusters. The Frameworks for the Business & Consumer Services Occupational Cluster¹⁵ includes additional units on a variety of PFL topics including banking, credit, investing, and budgeting. Lastly, the Digital Literacy and Computer Science Curriculum Framework (The Department of Elementary and Secondary Education, 2016) addresses using technology to analyze financial data.

Appendix E lists the topics that are included in the various curriculum frameworks sorted by grade level.

Q1.2. Requirements to teach or take personal financial literacy content

In Massachusetts, school districts have the power to enforce content requirements on their schools and may impose requirements to teach PFL. We asked districts whether they prescribed any such requirements.

¹⁴ Available here: <https://www.doe.mass.edu/ccte/cvte/frameworks/>.

¹⁵ Available here: <https://www.doe.mass.edu/ccte/cvte/frameworks/?section=business>.

Most districts do not require schools to teach PFL (73% of respondents). Districts which answered yes to requiring schools to teach PFL do so mostly at the high school level (six of the nine that have a requirement). Only two districts require PFL to be taught at all grade levels in the district.

Survey responses on this issue may understate the proportion of districts that have a PFL requirement, because PFL education requirements can be imposed indirectly through curriculum frameworks that include PFL content (mainly the Math and History and Social Science Curriculum Frameworks). Districts that require schools to follow these curriculum frameworks indirectly require schools to teach that content. A third of our respondents answered that they use the 2017 Mathematics curriculum framework, which includes some personal financial literacy content for the elementary and middle school grades (K-8). The Math curriculum framework is the most cited of all standards, including by districts that do not require any PFL education or that do not require that sort of education at the elementary or middle school grade levels. Assuming that all the schools in these districts are indeed required to follow the Math curriculum framework, these districts can be seen as requiring schools in the elementary grade levels to teach some PFL content.

When asked whether they require schools to offer electives in PFL, 60% of districts responded that they do not have such a requirement.¹⁶ Not surprisingly, districts that do require a PFL elective, do so only at the high school level.

When combining the response on district requirements to offer PFL content (including indirectly through curriculum frameworks), we find that 19 districts, representing 57.6% of all the districts that responded to our survey, require schools to have some form of PFL content - as an elective or otherwise, though not necessarily as standalone courses.

Of the 17 districts that responded they do not have any PFL requirements, ten said they intend to make changes to their PFL instruction in response to the new History and Social Science curriculum framework or the recent financial literacy legislation. Only one district responded that no changes in personal financial literacy instruction are planned. An additional five districts said that no decision has been made on the matter.¹⁷ These responses suggest that the personal financial literacy field is growing and that there could be an increase in the need for state support to districts who currently have no requirements for PFL education but may be interested in introducing such a requirement. Figure 2 illustrates the different district level requirements.

¹⁶ An additional two respondents answered that they do not know whether the districts require any of the schools to offer a personal financial literacy elective.

¹⁷ One district did not respond to the question which may indicate not knowing the answer.

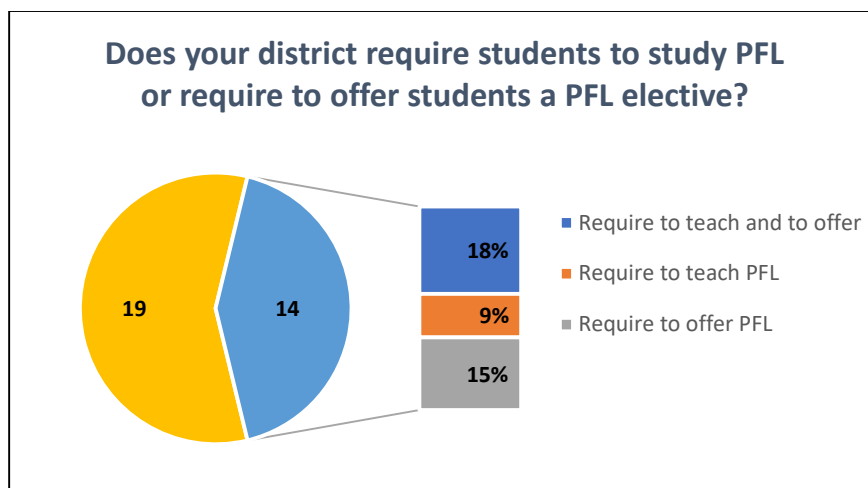


Figure 2

Moving to the school level, data from survey responses and from our analysis of programs of study indicates that a small minority high schools require students to participate in a course that includes PFL content. Combining the data gathered from our analysis of programs of study and the data gathered from our survey, we find that altogether, of the 108 high schools from our sample for which we have data, 18 (16.6%) schools require students to take at least one course that includes some PFL content¹⁸ (See Figure 3). Four schools require students to take more than one such course (the courses are required throughout multiple grade levels); in two cases these courses are part of the career or vocational program which, among other things, address financial literacy or money management; two other schools have three separate math courses that include some PFL content. Appendix F lists the courses and personal financial literacy topics they include.

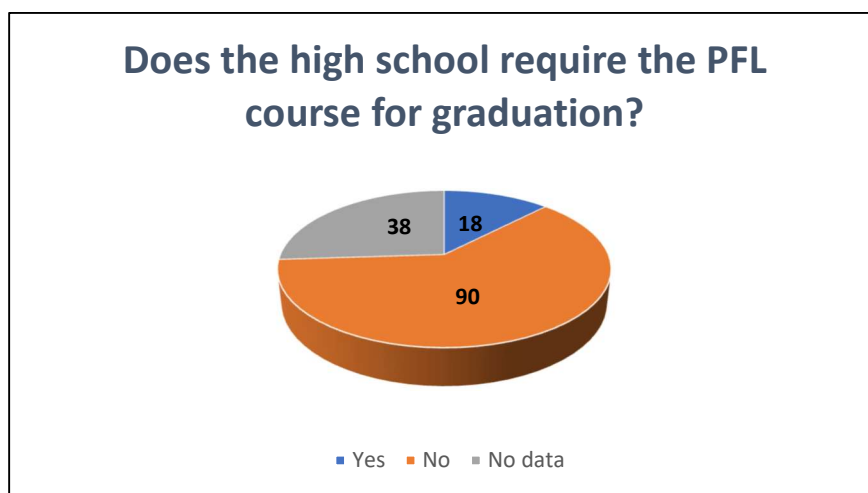


Figure 3

When discussing requirements, it is important to note that, when a school requires students to take a course, it might not necessarily mean that 100% of students in the school do so. For example, one of the schools requires students to take a senior history course of which a large portion is dedicated to

¹⁸ We have no data on 38 schools.

PFL. Students are allowed, however, to switch this requirement with one of three other courses available in the Social Studies department, two of which are advanced courses (AP and dual enrollment) that do not include the PFL content. In an interview with the school's dean of social science, it was estimated that around 15%-20% of the students opt for one of these options.

A different way to look at requirements is by focusing on a class of students. Some high schools, while not requiring all students to study PFL, do have requirements that apply to a particular sector of students. This is common with special education students who may be required to take a life skills or math course that includes PFL topics. We identified 25 schools that offer similar courses which are likely to be a requirement for special education students. We identified PFL requirements for other groups of students as well. For example, one of the high schools in our sample operates a special competency-based program for a small group of students, allowing them to advance at their own pace and graduate after completing their requirements. All participants in the program are required to take the Post Graduate Planning course which includes financial seminars. Similar requirements can also be found in certain career pathways.

As for middle/elementary school students in these grade levels any curriculum taught is most likely universally applied to all students. Only 16 of the schools that responded to our survey, said they teach PFL. Three additional schools mentioned PFL related activities, bringing the total of middle/elementary school respondents that have PFL education to 19 (34.5% of responses). As mentioned, due to our low response rate to this survey and the significant difference between respondents and non-respondents, it is not possible to make assumptions on the entire population. However, as pointed out with regard to district requirements, schools may be unaware that they are teaching PFL topics through the Math or History and Social Science curriculum frameworks.

Our interviews with middle/elementary school principals suggest that it is also possible that schools underestimate their PFL education by not realizing that some experiential activities include a PFL component. Further detail on the PFL content and activities in middle and elementary schools can be found in the next section.

Q1.3. Teaching personal financial literacy content in schools

In our survey, we asked districts whether the schools they operate teach any PFL. Two thirds of responding districts (23 out of the 33) answered in the affirmative.¹⁹ As for grade levels, unsurprisingly, high schools were most commonly cited as having PFL, followed by middle schools, and then elementary schools:

Grade level	Rate of responding districts that offer PFL
High schools	63.6%
Middle schools	21.2%
Elementary schools	18.2%

¹⁹ Seven districts replied no (including one district that earlier responded that the district requires schools to teach personal financial literacy) and three said they did not know.

Data from other sources conforms with our district level data, meaning that the majority of high schools offer some PFL education. The vast majority of our high school survey respondents (35 schools representing 85% of respondents) reported having at least one course that has some PFL content in it. Our analysis of programs of study suggests this number may be even higher, with 95.8% of schools offering a course with some personal financial literacy content – only four schools did not have any PFL content. See Figure 4. Yet, as mentioned earlier, program of study data under-represents charter schools and other smaller schools and may overestimate the rate of schools that do have PFL education. In addition, not all schools offer the same level of PFL education, and the extent of that education can vary drastically. More on the variety of PFL offerings in high schools later in this report.

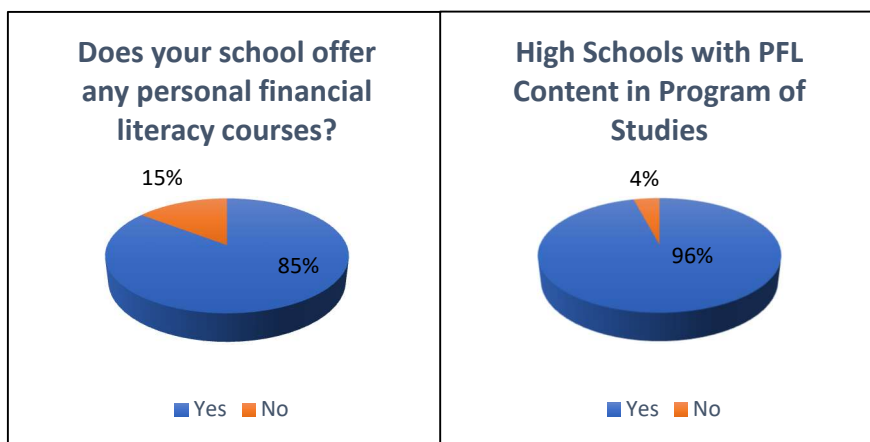


Figure 4

The proportion of middle/elementary schools teaching some PFL is even harder to gauge because of the low response rate to our survey and the lack of secondary data sources. This is in comparison to the districts survey which revealed that altogether, only 16.3% of all districts have PFL education in either middle or elementary schools. Our middle/elementary school survey responses indicate a higher percentage of 29.1%. The gap between the two surveys is difficult to explain. It may be that response to our middle/elementary school survey are bias in favor of schools that have some PFL education. At the same time, it may also be that district staff are not aware of all PFL content taught in lower grades, particularly if it is done informally and is limited to a special activity or a small number of lessons. We do have some indication that this is indeed the case, at least in some schools (see below). Finally, it may be that our information is incomplete, as our interviews suggest that, in some cases, educators are not aware that certain educational activities in these grade levels can be considered PFL education (e.g., content related to money that is taught in K-2 as part of the Math curriculum framework).

In the following sections, we will delve into the PFL content being taught in schools. We will do so at the district and school levels as well as at the course level. This will allow for not only an understanding of the extent to which districts or schools offer or require PFL education, but also what this education actually looks like. We will start by focusing on the high school level and then move on to the middle/elementary grade levels for which we have considerably less data.

High schools

In this section, we will elaborate on the PFL offered in high schools. We will look at the following aspects of PFL education at the high school level:

- The scope of PFL content in schools: the number of courses with PFL content offered in each school; the proportion of standalone PFL courses or courses that are mostly dedicated to PFL.
- The nature of PFL courses in high schools: the subject of these courses; an analysis of the topics included in these courses; and the availability of Honors and AP options for courses that have PFL content.

1. The scope of personal financial literacy courses offered in high schools

Most high schools that offer some PFL education do so in multiple courses. Survey data shows that 60% of responding schools that offer PFL education, do so in more than one course: 51% have either two or three courses (nine schools listed two courses and nine listed three courses), and 9% listed four courses. Similarly, our analysis of programs of study shows the vast majority of schools offer multiple courses with PFL content. Only seven schools were found to offer a single course with PFL content²⁰; 36 schools (39.6%) offer two to four courses with PFL content; 34 (37.4%) schools offer five to ten courses with PFL content; and finally, nine schools (9.9%) offer more than ten courses with PFL content.

However, not all courses are equal. Courses can address PFL in varying degrees and contexts. PFL content can be taught in standalone courses where the majority of a course is dedicated to PFL content. PFL can also be integrated into other subjects to varying extents. Standalone courses tend to be called “Financial Literacy”, “Personal Finance”, or some variation of the name. A course can also be considered standalone if it is obvious from its description that it is mainly focused on PFL.

Combining data from survey responses and programs of study, 69 schools²¹ offer a total of 98 courses that have a large proportion dedicated to PFL or are focused mainly on PFL.¹ As the two datasets – survey responses and programs of study – do not necessarily correspond, the data is presented separately for each dataset in Table 5.

Survey Data				Programs of Study Data			
Schools		Courses		Schools		Courses	
#	%*	#	%**	#	%*	#	%**
25	61.0%	29	39.4%	65	60.2%	91	19.5%

* Percent from total schools in dataset.

** Percent from all courses in the dataset.

Table 5

²⁰ In this segment we did not include data for from the district wide program of study and it is impossible to tell which courses are taught in which schools. However, as the program of study includes 13 different courses with PFL content it may well be that at least some of the high schools in the district offer more than one course with PFL content.

²¹ Courses included in the district-wide program of study were counted as offered in a single school. The district wide program of study includes three standalone courses. Each is counted as one course for the purpose of this report, but it is likely that several of the high schools in that district are offering students one or more of these courses.

22 of the courses, reported in the survey by 18 high schools, were also identified in their corresponding programs of study.

As can be seen from the table, while more than half of the schools for which we have data offer a standalone PFL course, PFL courses are a minority of the overall courses identified as being standalone. The higher rate of standalone courses reported in the survey may be the result of non-response bias, if schools that offer standalone courses were more likely to respond to the survey. As we have no data on 38 schools from the 146 schools in our sample, it is possible that the actual rate of high schools offering a standalone course is less than 50%.

2. The nature of PFL courses offered in high schools

Subject

PFL can be infused into a variety of different subjects, as demonstrated by the presence of PFL topics in numerous curriculum frameworks. In addition, the recent financial literacy legislation states that a school district or a school “*may incorporate the financial literacy standards ... into existing curriculum including, but not limited to, mathematics, history and social sciences, technology or business*”. Indeed, PFL topics are infused into many different subjects, but it is possible to identify certain subjects that appear more prominently.

Table 6 shows the breakdown by subject of the courses reported in our survey and the courses identified in our analysis of programs of study:

	Business	Comp. Health	Digital Literacy/ Comp. Science	History/ Social Science	Math	Special Ed.	Voc. Tech. Ed.	Other	Total
Survey (#)	27	4	0	6	24	1	4	5	71
Survey (%)	38.0%	5.6%	0.0%	8.5%	33.8%	1.4%	5.6%	7.0%	
Program of study (#)	163	15	1	79	96	49	23	41	467
Program of study (%)	34.9%	3.2%	0.2%	16.9%	20.6%	10.5%	4.9%	8.8%	

Table 6

Courses catalogued under the ‘Other’ category can be further narrowed as follows:

- Eight courses are offered by Guidance Counseling departments.
- Eight courses cover business topics but are not offered within a business department. These include courses such as: Small Business Planning and Management and Accounting I.
- Seven courses are part of career education and transition to adulthood (these are not courses offered by Guidance Counseling departments).
- Four courses relate to U.S. national service: Junior Reserve Officer Training Corps (“JROTC”), Navy Junior Reserve Officer Training Corps (“NJROTC”), or U. S. Air Force Junior ROTC Aerospace Science.

Topics

We asked survey respondents to indicate which PFL topics are covered in each course they reported. Because data was gathered by means of a survey, respondents were limited to ten categories, each covering several related topics. The categories were constructed in consultation with DESE to reflect the list of topics mentioned in the Financial Education Act. It is important to note that PFL standards and literature are not consistent in their definition of PFL topics. In addition, topics may be grouped in different ways, and not all topics are included in all standards and sources.

The following is the list of topics survey respondents were asked to consider:

- Banks and financial services.
- Budgeting or balancing a checkbook.
- Consumer rights and responsibilities, including online commerce and home rental or ownership.
- Credit, debt, and loans.
- Financial decision-making and evaluating media content that relates to personal finance.
- Risk management, fraud protection, and insurance.
- Saving, investing, and planning for the future.
- Simple and compound interest.
- Spending, including charitable giving.
- Taxes.

For each course mentioned in the survey, respondents were able to choose more than one topic. Table 7 lists of the topics in order of popularity, starting with those topics picked most often. Percentages reflect the share of overall courses that cover the topic.

Taxes	60	84.5%
Credit, debt, and loans	59	83.1%
Banks and financial services	54	76.1%
Saving, investing, and planning for the future	54	76.1%
Simple and compound interest	54	76.1%
Budgeting or balancing a checkbook	53	74.6%
Financial decision-making and evaluating media content that relates to personal finance	53	74.6%
Risk management, fraud protection, and insurance	47	66.2%
Spending, including charitable giving	44	62.0%
Consumer rights and responsibilities, including online commerce and home rental or ownership	43	60.6%

Table 7

As can be seen above, while there is some variation in popularity, all of the topics are covered by more than half of the courses mentioned in the survey. Indeed, over half the courses mentioned in our survey cover more than eight of the topic groups and less than a fifth cover four or less of the topic groups. It is important to note that covering multiple topics does not necessarily indicate that a large proportion of the course is dedicated to PFL, as topics can be touched upon only lightly. In any case, the survey data on PFL topics is consistent with our assumption that survey respondents were more likely to mention “traditional” PFL courses that cover multiple core topics. As mentioned previously, when analyzing programs of study we adopted a different approach aiming to encompass all courses that cover topics related to PFL, whether they be the core topics mentioned above or more peripheral topics that are still strongly related to PFL. Table 8 details the number of courses identified in programs of study that mentioned terms related to each of the topic groups listed in the survey. As before, the topics are listed by popularity.²²

Saving, investing, and planning for the future	141 courses	30.2%
Banks and financial services	116 courses	24.8%
Credit, debt, and loans	109 courses	23.3%
Budgeting or balancing a checkbook	106 courses	22.7%
Consumer rights and responsibilities, including online commerce and home rental or ownership	78 courses	16.7%
Risk management, fraud protection, and insurance	67 courses	14.3%
Spending, including charitable giving	64 courses	13.7%
Taxes	59 courses	12.6%
Financial decision-making and evaluating media content that relates to personal finance	39 courses	8.4%
Simple and compound interest	14 courses	3.0%

Table 8

Owing to our broad approach in analyzing programs of study, we identified additional PFL topics which are not part of the ten topic groups used for the survey. The top five additional topics we identified are presented in Table 9:

²² Note that a single course description might mention several topics and therefore the sum total of courses in the table is higher than 467.

Money Management or financial management	66 courses	14.1%
Earning an income and work-related benefits	36 courses	7.7%
Education, careers, and employment (personal finance perspective)	35 courses	7.5%
Finance	34 courses	7.3%
Money	25 courses	5.4%

Table 9

Figure 10 illustrated the relative popularity of the topics in courses reported in the survey versus courses identified in programs of study.

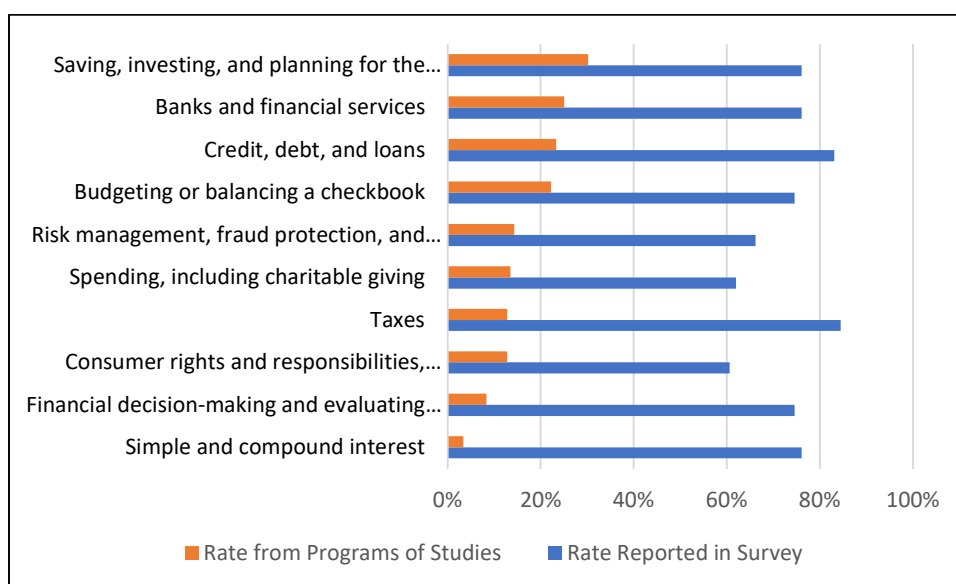


Figure 10

Additionally, we found that 82 of the courses mentioned one of the following general terms, either in the title or course description: personal finance; individual finance; financial literacy; and financial education.

The full list of topics and key terms can be found in Appendix G.

Finally, we included in our analysis courses in accounting, entrepreneurship, and economics, even if they did not mention any of the key terms related to the various PFL topics because their content is closely related to personal financial literacy. Our approach was confirmed in our interviews, where several interviewees mentioned such courses as vehicles to approach PFL topics. One High School teacher told us about the Accounting I course:

“I always try to spin it back to them personally, when we’re talking about credit and debit, you know, we’re talking about credit and debit in accounting, which is different than the credit and debit in real life. So, I try to explain to them the difference but at the same time talking about a

debit card and a credit card and how they work. So, they do get a taste of it in Accounting I” (HS05).

A high school principal we interviewed told us the following on an Economics course taught in another school where he used to teach:

“And they had kind of the personal finance curriculum running almost side by side by the economics curriculum. So, as they were studying market volatility investments and things like that, they would also be looking at their own. And what they could possibly do. When they looked at debt, they would understand what debt they could take on. But at the same time, you know, they would look at the type of car they could afford and the type of place they could live in, given the amount of money they were getting. So, they understood taxation, they also understood personal taxation” (HS03).

Of the total of 467 relevant courses, we identified 68 such courses:

- 21 courses are Economics courses or Business courses that cover economics
- 28 courses are Accounting courses
- 20 are Entrepreneurship courses

It is obvious that the picture emerging from the analysis of topics in programs of study is considerably different than the one painted by survey data, with considerably more courses covering specific PFL or PFL related topics. This is probably due to the broad approach we used in our analysis of programs of study compared with what we requested from survey respondents. It may also be that, because we are relying only on a short description of the courses, the actual coverage of PFL topics by the courses is in fact different.

Diving into the topics, course descriptions allow us to better understand what aspects of each topic are most commonly covered. Here is a description of the trends we identified in each of the topics.²³

Saving, Investing, and Planning for the Future

Saving, Investing, and Planning for the Future is the most commonly mentioned topic in our dataset. Terms related to the topics were mentioned 262 times in 141 separate courses. Most of the terms relate to investing (e.g., “the stock market” and “financial products”), with a total of 131 mentions. Terms related to saving were considerably less common, with 54 mentions. As for ‘Planning for the Future’, we included any term related to long term planning, such as “financial planning” and “goal setting”, as well as planning for large expenses in the longer term (e.g., college or retirement).²⁴ All in all, relevant terms were mentioned 77 times.

²³ In this analysis we look at the number of times each term is mentioned, including in cases where terms belonging to a single topic are mentioned more than once in a single course. This will allow us to get a more nuanced picture of the PFL topics that are covered in high school courses.

²⁴ Terms related to buying a house were not included here, as they were counted in other topics.

Banks and Financial Services

We identified six key terms that fall under the Banks and Financial Services category. These terms were mentioned 121 times in 116 individual courses. The key term most addressed is 'banking' (62 mentions), but we also found that some courses mention specific bank services (e.g., transactions) and different types of bank accounts (checking/savings). 19 mentions of financial institutions and services were also identified.²⁵ Only two courses specifically mentioned tracking and reconciling checking accounts as a topic; however, this topic might also be addressed when students are taught about bank accounts in general or about budgeting.

Credit, Debt, and Loans

Terms related to Credit, Loans, and Debt were mentioned 164 times in 109 courses. Almost half of the courses in this topic category address credit, including credit scores. This is separate from credit cards which are mentioned only 19 times. Loans and debt are mentioned in 54 courses (33 loans; 21 debt), making it the second most mentioned key term, with almost half of all courses in this category mentioning it.

Budgeting or Balancing a Checkbook (including Money Management)

Key terms related to Budgeting or Balancing a Checkbook are mentioned 117 times in 106 courses. The proportion of special education courses that include topics related to budgeting seems slightly higher than the proportion of special education from all courses (10.1% versus 17.1%). This is because almost half of the special education courses identified address budgeting (in particular, courses that deal with transitioning to adulthood).

Consumer Rights and Responsibilities, Including Online Commerce and Home Rental or Ownership

Terms related to the topic of Consumer Rights and Responsibilities, including Online Commerce and the Purchase or Rental of a Home, are mentioned 88 times in 78 courses. We did not find any references to online commerce in course descriptions, and most courses generally to consumer issues, behaviors, etc. The legal aspects of consumer rights and responsibilities are also mentioned a significant number of times (25 mentions). The final major subtopic here is home rental and ownership, including mortgages and rent, with a total of 29 mentions.

Risk Management, Fraud Protection, and Insurance

Risk Management, Fraud Protection, and Insurance related terms appear 75 times in 67 courses. The vast majority of these are related to insurance rather than risk management; however, it is probable that the concept of risk is addressed when discussing insurance. We found only three courses that mention fraud or identity protection, indicating that this may be a topic needing increased attention.

Spending Including Charitable Giving

Terms related to Spending and Charitable Giving are mentioned 90 times in 64 courses. The most prominent terms in this topic are buying or spending: buying or maintaining a car is mentioned 23 times; housing costs (referring specifically to cost rather than merely buying or owning a house) are mentioned

²⁵ However; 'insurance' was included under the 'Risk Management, Fraud Protection, and Insurance' topic.

8 times; other specific expenses (e.g., food or clothing) are mentioned 5 times. We did not find any courses that mentioned charitable giving. This topic may require additional attention.

Taxes

We identified 65 mentions of taxes in course descriptions in 59 courses. These include mostly taxes in general (including federal or state taxes). We also found 18 mentions of taxes in relation to income and employment, as well as deductions.

Financial Decision-Making and Evaluating Media Content that Relates to Personal Finance

Terms related to Financial Decision-Making and Evaluating Media Content that Relates to Personal Finance were mentioned 44 times in 39 courses, a relatively low rate compared to the other topics. It is important to note, however, that financial decision-making is probably addressed throughout PFL education and when discussing other common topics such as budgeting. We could not find a course that mentioned evaluating media content relating to personal finance, although it may be that media content is discussed when talking about consumer choices.

Simple and Compound Interest

This topic was mentioned only 16 times in 14 courses. As this topic is considerably narrower than the others, the small number of mentions is not surprising. Also, it is very possible that there are additional math and business courses that address interest to varying extents without mentioning so in the course description.

Course level

The final aspect of high school PFL courses that is important to highlight is the course level. Looking at course level is important because, as several survey respondents and interviewees mentioned, with increasing pressure to take advance level courses, some students are unlikely to take a PFL course that does not offer Honors or AP credit. In fact, two high schools mentioned the lack of AP or Honors options as a barrier to PFL education. This issue was also raised by two of our interviewees.

Here is how one survey respondent put it: *“Financial literacy courses are not valued by college admissions. Students are not likely to take classes that will not “count” toward college admission like an Advanced Placement course”*.

This theme came up in interviews as well. A high school principal told us: *“you have all of the high achievers that take all of the classes that matter, ... advances and AP classes, and personal finance would never touch them” (HS03)*.

The lack of AP or Honors PFL courses is more prominent when PFL course are part of the Math or History/Social Science departments, where they compete with other electives that do have an advanced option.

We looked at the course level for the courses we identified in high school programs of study and found that more than three quarter of all courses either did not have an Honors or AP option or were unleveled (365 courses). The rest are either Honors or AP courses, or have an Honors or AP version available for students. Moreover, of the 92 standalone PFL courses we identified, only 10 were

Honors/AP or had an Honors/AP option, meaning that these courses are likely to be less attractive elective choices for many students.

Q1.4. Personal financial literacy education in middle and elementary schools

In this section, we will describe the data we gathered about the nature of PFL education in middle/elementary schools. As mentioned, 19 of our survey respondents (34.5%) have some PFL education in their schools. Nine schools indicated that PFL education exists for all grades offered at the school. The rest offer PFL content for only some of the grades at the school.

Looking at the grade levels at which PFL content is taught, Table 11 shows the number of schools that offer PFL education at each of the grade levels.

Grade level	Schools offering PFL (#)²⁶
Grade K	8
Grade 1	10
Grade 2	9
Grade 3	7
Grade 4	7
Grade 5	8
Grade 6	3
Grade 7	4
Grade 8	3

Table 11

In summary, the 16 respondents that reported having PFL content in their school described 59 separate cases where students in middle or elementary grades are taught PFL.

At first glance it may seem that PFL education is more prevalent in the lower grades. However, the majority of our survey respondents are of elementary schools (81.2%), and only a minority serve middle school grade levels (27.3%). When looking at the grade levels with PFL as a percentage of responses by schools that serve those grades, the distribution is slightly more balanced, as can be seen in Table 12. Figure 13 illustrates the rate of schools responding to have PFL by the type of school to respond.

²⁶ Information is missing for three schools that mentioned their PFL education in a different section of the survey.

Grade level	Schools offering PFL (%)
Grade K	19%
Grade 1	23.8%
Grade 2	21.4%
Grade 3	16.3%
Grade 4	17.1%
Grade 5	20%
Grade 6	13.6%
Grade 7	26.7%
Grade 8	20%

Table 12

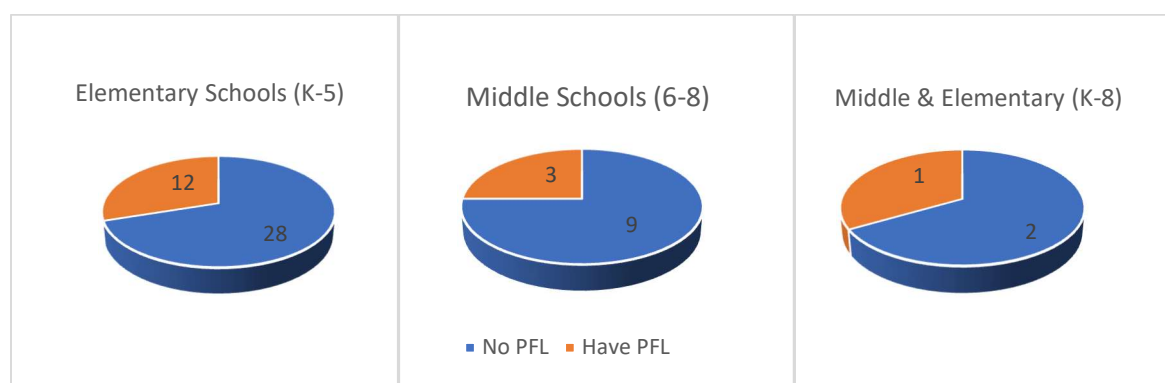


Figure 13

As with high schools, we asked middle/elementary survey respondents what topics are covered in their PFL education. Respondents were asked to select the topics by three different grade ranges: K to 2; 3 to 5; and 6 to 8.²⁷ The list of topics in this survey has two additional topics: Income and Careers and Introducing Money. These topics are relevant to younger ages. Introducing Money is included in the Math and the History and Social Science curriculum frameworks for grades K to 2. The History and Social Science curriculum framework also covers Earning and Income in grades 1 to 2.

It is not surprising then, that Introducing Money is by far the most prominent topic selected in the survey, followed by Income and Careers and Banks and Financial Services. Unsurprisingly as well, respondents reported most often that PFL is integrated into Mathematics (93% of the cases), followed by History and Social Science (24% of the cases).²⁸ PFL was reported to be taught as a standalone subject

²⁷ This narrowed down the number of responses per question from 59 (the number of individual grade levels where PFL is taught) to 25 (the number of grade ranges where PFL is taught).

²⁸ Because they were responding on grade ranges (K-2; 3-5; 6-8), respondents were allowed to pick more than one subject.

in only 6 cases (12%). As far as scope is concerned, in most cases, between five to ten lessons were dedicated to PFL, which is not an insignificant amount.

Table 14 and Figure 15 show the prevalence of each topic by grade range.

Topic	Grades K-2	Grades 3-5	Grades 6-8	Total
Introducing money	9 (90%)	6 (66.7%)	4 (66.7%)	19 (76%)
Banks and financial services	2 (20%)	3 (33.3%)	4 (66.7%)	9 (36%)
Income and careers	1 (10%)	4 (44.4%)	4 (66.7%)	9 (36%)
Budgeting or balancing a checkbook	0	2 (22.2%)	4 (66.7%)	6 (24%)
Saving, investing, and planning for the future	2 (20%)	3 (33.3%)	1 (16.7%)	6 (24%)
Simple and compound interest	0	3 (33.3%)	3 (50%)	6 (24%)
Spending, including charitable giving	1 (10%)	2 (22.2%)	2 (33.3%)	5 (20%)
Credit, debt, and loans	1 (10%)	1 (11.1%)	2 (33.3%)	4 (16%)
Financial decision-making and evaluating media content that relates to personal finance	1 (10%)	1 (11.1%)	2 (33.3%)	4 (16%)
Taxes	0	1 (11.1%)	3 (50%)	4 (16%)
Consumer rights and responsibilities, including online commerce and home rental or ownership	0	0	3 (50%)	3 (12%)
Risk management, fraud protection, and insurance	0	0	1 (16.7%)	1 (4%)

Table 14

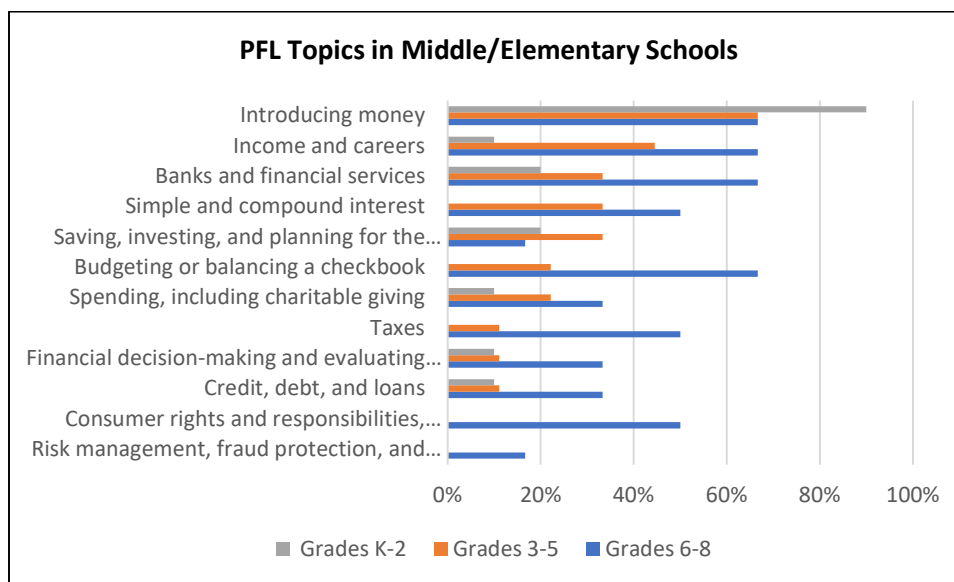


Figure 15

We found that when it comes to PFL in lower grades, survey data tells only part of the story. All of the interviews with administrators from middle and elementary schools revealed a rich array of instruction and special activities that contribute to students' financial literacy and were not mentioned in the survey. Notably, although six out of the ten interviewed schools responded in the survey that they do not offer students any PFL content, the interviews revealed some PFL content was taught in all of them. As one principal explained: *"When you asked, I was thinking about a unified mandated financial literacy program. I believe teachers and principals make things happen. We cover money but not in particular talk about using money etc. intentionally"* (EL11).

Although some schools mentioned that their district encourages them to have PFL instruction: *"The district encourages, it is a thing that's done in the district but is not dictated. Schools do what they think is appropriate"* (EL09), we found that as a rule, PFL instruction or activity is the result of informal school level initiatives rather than guidance from above. Moreover, in many cases PFL is introduced at the initiative of the individual teacher rather than through school wide policy.

As one K-8 school principal described:

"We've been lucky enough the last two years to have a math educator in the middle school, who, not as a formal part of the curriculum, but once MCAS testing is done, she kinda goes all out, for lack of a better word, in teaching what she thinks is most important, which is financial literacy. She even takes children to the bank, she teaches children about interest rates. So, she does a number of things like that".(ME14).

Here are some examples of the ways in which children are exposed to PFL content in grades K-8:

Example 1: expanding PFL topics included in curriculum frameworks

All the elementary schools interviewed teach young students at grades K to 2 about money as part of their math instruction. This will always include understanding the relative value of coins, as it is mandated in the Mathematics Curriculum Framework, but may lead to more in depth discussions about the role of money in society and needs and wants, as is described below:

"So, for children it's a lot of conceptual understanding of needs and wants, saving and spending, and the actual value of money, which thankfully Massachusetts kept in their math standards"(EL07)

"It happens that teachers talk about broader subjects. It's a case by case things. They try to make real world connections. Most teachers do that" (EL11)

"What teachers do is use money in other contexts. Like in teaching decimals use examples from finances. Examples like buying in the grocery. Not talking about how to buy a house. More like using money in other contexts" (EL13)

"There was a second-grade teacher this year who gave kids a budgets and kids had to use math skills" (EL09)

One elementary school principal told us how their social science curriculum in elementary school touches upon a variety of PFL topics such as taxes and saving:

“As far as taxes and ... savings and things like that, I would say in fourth or fifth grade social studies students learn about like what tax is” (EL10)

In later grades some schools might use PFL topics such as making change or interest to support the instruction of percentages and decimals. Here is an example from a middle school:

“When they talk about interest, the teachers have gotten more into talking about credit cards and how credit works, which especially since 2008 I feel like that's become part of their awareness that that's a good opportunity to talk to kids about” (MI15)

Example 2: utilizing community partners

A few schools have had special activities organized by community partners such as Junior Achievement as well as local banks and credit unions who have come to the school and instructed students on PFL topics. In most cases these were full-day or half-day events, but there were also cases where the community partner gave a series of lessons.

“they actually set up the time with the teachers and it was called Teach Your Children to Save Today. And the representative from [the local bank] came out and she met with Mister XXXX's class which is the special education class separate from Miss XXXX's class which was the general education first grade class. [...] It was a one-time visit” (EL08)

“every fifth-grade student in [the district] goes through the Junior Achievement financial literacy curriculum and that is done with community partners from local banks” (DI01)

Example 3: reading books with PFL topics

One of the elementary schools that responded “no” (in the survey) to teaching PFL, later mentioned in the interview that they use books that introduce PFL topics for ELA classes, opening a broader discussion on these topics:

“During ELA, teachers do read ... Danny Dollar Millionaire. And they talk about saving money, diversifying income. Through that they teach financial literacy. It's done by a decision determined by the teacher. It's not mandated. If a teacher finds that it fits nicely in a skill or a standard that they need to teach they will use it” (EL11)

Example 4: taking advantage of unexpected opportunities

In one of the most innovative cases, an elementary school principal told us how elementary schools in the district got together to utilize a weekly class period during a contractually required teacher prep time, to incorporate a PFL unit into the curriculum. The initiative came from “content literacy” teachers who were tasked fill some of the periods used for teacher prep.²⁹ Content literacy teachers from all of the elementary schools in the district took part in the development of the curriculum. In the particular school that participated in the interview, the PFL unit also involved a local credit union that supplied curricular material and instruction. PFL topics covered throughout elementary school include, needs and wants, the uses of money (spending, sharing, saving), and consumer issues. Here is a brief description of how the initiative came to be:

²⁹ Other subjects taught during teacher prep periods are art, music, and gym.

“So, what happened is, we had gone through a span of really bad budget cuts. And they basically had to, they laid off all the library media specialists. And those people had covered some of the teacher classroom prep time. [...] So, the then superintendent conceived this idea of a content literacy job. And that’s how it came into being. [...]”

We [the content literacy teachers D.G.] kinda looked at all of the standards we felt got pushed out of the classrooms just because of time [...] So we felt like a lot of the science and social studies, and financial literacy were pushed out of the curriculum. So, we created one. It gets tweaked every year. But the financial literacy has stayed in it because that’s how we know it gets done” (EL07)

Example 5: learning budgeting through special projects or behavioral incentives

Many schools have special projects or activities that require students to budget resources, a central PFL skill. In earlier grades, budgeting projects are also intended to promote an understanding of the differences between needs and wants. This is a central goal in early education and an important skill to achieve financial capability.³⁰ Here are some examples:

- a. **Project based learning:** Several schools described special projects that are part of a project-based learning approach, where students get a limited amount of money that they need to budget. Another school had a program where children could choose a project involving investing in the stock market and budgeting. Here is a description of one such project:

“they’re given a \$100 and a catalogue, and we said “OK, now I want you to pick out what you want, and you can only spend \$100”. So just to give kids a sense of what \$100 actually buys. [...] And some kids were given clothing catalogues or were given grocery fliers. And the teacher differentiated based on students’ level and what they needed for support” (EL10)

- b. **School money:** Some schools use school money as a behavioral incentive.³¹ Students earn “money” by performing desirable tasks. They can spend their “money” in school stores or for special privileges (one school referred to it as a “token economy”). While this activity is not accompanied by intentional instruction around budgeting, it allows students to experience budgeting and gain an understanding that money is a limited resource.

A principal of an elementary school that utilizes such incentives described it as an effective method to –

“start a basic level thinking about financial literacy. All the things they need to think about as adults. Getting them thinking about earning and having enough or giving them a budget including things like breaking a pencil and having to pay for a new one” (EL09)

³⁰ Needs and Wants is included in PFL standards for younger ages. For example, the National Standards in K-12 Personal Finance Education, Category 6: Financial Decision-Making knowledge statements for grades K and 4.

³¹ This will be part of a PBIS (positive behavioral interventions and supports) system and will involve the school counselor and, where necessary, the special education staff.

- c. **School store or fairs:** Several schools have a student-operated school store. Some of the stores use school money and some real-world money. In all cases, the students that operate the store gain PFL experience in budgeting and handling money:

“For experiential learning, we have a school store run by 5th graders. We keep a ledger and meet once a week to decide what to buy for the store. [...] They have a budget and purchase merchandise from it”. (EL13)

Another school mentioned having book fairs in which students were given money by parents and had to budget their purchases.

- d. One school received a grant with the stipulation that students must take part in the decision on how to spend it. The school used this opportunity to talk to students about wants and needs: *“We met with the student council to decide how to spend. ...discussed needs and wants. The student council and the instructional team generated a list of 10 options. They made a google survey that was filled by all of the students in their tech class.” (EL13)*

These examples may seem trivial, but practical experience with money (real or fake) can be very important in building money management skills. Many of our interviewees expressed their impression that, as a result of the diminished use of cash and the increased dominance of internet shopping, kids today lack an understanding of the value of money:

“when we were kids, we had money. You earned money, it was very tangible, you shoveled somebody’s sidewalk - they gave you \$5, or whatever. And when you took that to a store... these children don’t have that experience because so much of what we do is unrelated to the value of what they’re spending, if that makes any sense. They shop, and they have a card, their parents have a card, so they don’t have any idea of how much something costs”. (EL07)

Experiential activities, such as the ones described here may also be a suitable way to approach the topic of wants and needs in a neutral setting that can avoid the cultural pitfalls mentioned by some of our interviewees. This will be described later on.

Q1.5. Use of standards and curricula (high schools and middle/elementary schools)

Standards

Another way of assessing the PFL content that is taught in schools is by examining the standards and curricula used to teach the topic. We asked all respondents who said they offer PFL education what standards or curriculum frameworks they consulted in designing PFL content. Table 16 is a summary of survey responses.

Standards/Curriculum Framework	Districts		High schools		Middle/ Elementary		All responses	
	#	%	#	%	#	%	#	%
The DESE History and Social Science Curriculum Framework (2003 edition)	5	21.7%	7	20.0%	0	0.0%	12	16.2%
The DESE History and Social Science Curriculum Framework (2018 edition)	3 ³²	13.0%	6	17.1%	3	18.8%	12	16.2%
The DESE 2017 Mathematics Curriculum Framework	11	47.8%	13	37.1%	9	56.3%	33	44.6%
The Council for Economic Education National Standards for Financial Literacy	8	34.8%	15	42.9%	1	6.3%	24	32.4%
The Jump\$tart National Standards in K-12 Personal Finance Education	2	8.7%	7	20.0%	1	6.3%	10	13.5%
No standards were consulted	0	0.0%	1	2.9%	3	18.8%	4	5.4%
Other	4	17.4%	6	17.1%	0	0.0%	10	13.5%

Table 16

Other standards that were mentioned by respondents are:

1. The Comprehensive Health Curriculum Framework was named by one (1) district.
2. The Vocational Technical Education Framework was named by three (3) high schools.
3. A few respondents answered that they use a variety of sources and consult with partners to develop their own content.

As can be seen, unsurprisingly, the Mathematics curriculum framework was most commonly cited, particularly by middle/elementary school respondents (56.3%). As for the History and Social Science curriculum framework, looking at the two editions in aggregate, 18 respondents at both the district and school levels responded that they use either the 2003 or the 2018 version of the curriculum framework or both (24% of all respondents who have PFL education).

The Council for Economic Education National Standards for Financial Literacy (Council for Economic Education, 2013) are also popular, at 32.4% of responses. These standards offer detailed standards for three grade levels: grade 4, grade 8, and grade 12. The standards cover six PFL topics, each having a general definition followed by a statement of the concepts and benchmarks that are unique to each of the grade levels. The topics covered by the standards and their definitions are:

1. Earning Income.
2. Buying Goods and Services: Includes reference to making informed spending decisions, which entails collecting information, planning, and budgeting.

³² An additional district mentioned that they planned to use the 2018 History and Social Science Curriculum Framework next year.

3. Saving.
4. Using Credit.
5. Financial Investing.
6. Protecting and Insuring.

Another set of standards that were mentioned, though less than the Council for Economic Education Standards, are the Jump\$tart National Standards in K-12 Personal Finance Education (Jump\$tart Coalition for Personal Financial Literacy, 2017). These are less common with only 13.5% of respondents indicating to use them. These standards cover six PFL topics that are broken down into overall competency and a series of concrete standards. As with the CEE's National Standards for Financial Literacy, the topics and standards are then tailored to specific age groups by a list of suitable knowledge statements – K, grade 4, grade 8, and grade 12. The topics covered in the National Standards in K-12 Personal Finance Education are:

1. Spending and Saving.
2. Credit and Debt.
3. Employment and Income.
4. Investing.
5. Risk Management and Insurance.
6. Financial Decision Making.

Very few respondents answered that they did not consult any curriculum frameworks or standards for their PFL education.

Curriculum

In Massachusetts local educators are the central decision makers when it comes to preparing their curriculum and adopting available curriculum material (DESE, 2018c). As PFL is not a subject on which most teachers have expertise, access to a reliable age-appropriate curriculum is essential.

There is a variety of PFL curriculum material available for use in schools; however, most are only appropriate for use in high schools. Some are paid curricula while others are available free of charge. We asked high school and middle/elementary schools what curriculum material they used, if any, to teach PFL. We listed 14 commonly cited curricular sources for high schools and 15 commonly cited curricular sources for middle/elementary schools. Respondents were able to add additional sources not listed in the survey. Listed curricular sources and detailed results follow:

High schools

The most commonly selected curriculum by high school respondents is Everfi. Nine of the high schools that have PFL education (25.7%) said they use the Everfi Curriculum. Everfi provides digital PFL curricula to various grade levels. The Everfi curriculum is a paid curriculum that can be taught 'as is'. Everfi was also mentioned in our interviews by one high school and one middle school. Both noted that the curriculum is engaging to students, easy to implement, and comes with training from Everfi, making it attractive for schools.

The second most commonly chosen curriculum provider is NextGen Personal Finance (“NGPF”), chosen by 7 respondents (20%). NGPF is a non-profit that provides, among other things, extensive resources to instruct PFL to school aged kids. The NGPF website provides complete PFL courses and individual PFL units with lesson guides and activity packets that teachers can use when constructing a course.

Following Everfi and NGPF, the PFL resources provided by the Federal Deposit Insurance Commission (MoneySmart), the Federal Reserve, and the U.S. Department of Treasury (MoneyMath: Lessons for Life), were each selected by four respondents. The rest of the curricular sources were selected by less than four respondents.

Nine respondents added additional curricular sources that were not mentioned in the list, including Junior Achievement, the We the Economy series of short films, the M. Ellen Carpenter Financial Literacy Program by the Boston Bar Association, APEX (paid curriculum), Foundations in Personal Finance (paid curriculum), the Network for Teaching Entrepreneurship, Early Investors, and more.

All the curricular sources in the list were selected by at least one respondent. Nine respondents, representing a third of schools, selected more than one source to construct their curriculum. Two additional respondents said that teachers developed the curriculum based on multiple sources. A high school business teacher we interviewed talked about using curricular resources, *“not use them on a regular basis, but ... periodically throughout a course of a semester” (HS05).*

Schools might also use online and other resources to enhance their curriculum, as the same high school teacher described:

“For online platforms we use the website called seekingalpha.com and students use that for investing purposes where they set up their portfolio. We also use it to analyze from a technical and fundamental perspective. So, the students can walk out of here with a better idea of how the stocks trade and prices and such. So that's one of the websites that we use on a regular basis. In the past we used the budgeting challenge from H&R Block. That allows the students from... you know, to budget their money accordingly week to week. [...] We've done the finance challenge in class. The finance challenge is sponsored by the Mass Economic Council. [...] We go to DECA and FELA competitions throughout the school year” (HS05).

Finally, six high school respondents (17.1%) said that they did not use any curricular source. An additional five respondents did not answer the question.

Middle/elementary schools

Unlike the results from the high school surveys, most of the curricular resources in the middle/elementary schools survey were not selected by any respondent. The only sources that were selected were Junior Achievement (Biz Town or Our City), which was selected by two respondents, and Everfi, which was selected by one respondent. These curricular resources were also mentioned by a few of our interviewees.

Six respondents (37.5% from schools that have PFL education) added curricular sources that were not on the list, including Go Math (paid curriculum) and Steve Blank’s Lean LaunchPad (an entrepreneurship class). Two of the schools mentioned getting their materials from partners – Boston Saves, which offers financial education as part of its CSA program operating in K-2 grades in Boston

public schools and a local credit union. The relationship with the credit union was also described in an interview:

“And then we did get a lot of support from [the local credit union] especially. And they're sharing their materials, ... I think it's material they've created. ...Or maybe they get through like a network of credit unions [...] And I would say things are always adapted because very few teachers can teach something exactly as written” (EL07).

One respondent noted that the school built its own curriculum. An additional five elementary/middle school respondents said they did not use any curricular resource for PFL instruction, in line with the local and informal nature of PFL instruction in these grades. One elementary school principal described it well, by saying:

“Yes, there is financial literacy content in all grades, but not anything formal. [...] More about using finance and money in the context of other content. [...] Not direct instruction, not intentional but rather ancillary. [...] Nothing formal or constructed unless it's in the standards” (EL13).

As did one of the middle school principals:

“more so in the past few years I would say that it [math curriculum] kinda touches on introducing some of those concepts of financial literacy, but we don't have a discreet curriculum” (MI15).

Q.1.6. Culturally sensitive personal financial literacy education

Personal financial literacy education is meant to improve people's ability to handle their finances and improve their wellbeing. Different people have different financial needs (Vitt, 2009; Bauman & Hall, 2012; Herman, Hung, Burke, Carman, Clancy, Kaufman, & Wilson, 2015). For example, first or second generation immigrants may need additional instruction related to local financial institutions and culture; low income families, who are more likely to use alternative financial services, will need instruction related to these services and the possible availability of mainstream financial services; and families of color, who are less likely to own financial assets or risky assets (Olsen & Whitman, 2011; Prosperity Now, 2020), may need instruction related to these types of products. Furthermore, knowledge and attitudes towards money and personal finance are influenced by background, identity, and culture (Scheinholtz, Holden, & Kalish, 2011; Hens & Wang, 2007), including race and ethnicity (Tisdale et al., 2013; Choi, Reid, Staten, & Todd, 2009; Head, 2014; Olsen & Whitman, 2011), as children develop an understanding of finances early on from their parents and their immediate society and culture (Scheinholtz et al., 2011).

To be effective, PFL instruction needs to address the diversity in needs, knowledge, and attitudes towards money and finances (Tisdale, Taylor, & Forté, 2013). Yet, PFL curricula can potentially suffer from a cultural bias, having an *“implicit or explicit expectation that students will have the background typical of a white, middle class demographic”* (Choi et al., 2009, p. 11).

In their review of financial education initiatives aimed at minority populations, Olsen & Whitman (2011) found that *“formal education programs do not meet the specific information needs of Black and Hispanic consumers”* (p. 82). This means that, in most cases, educators are tasked with adapting their PFL curriculum to the needs of their students (Tisdale et al., 2013; Head, 2014). In the guide for financial

education curriculum assessment, published by the Rand corporation (Herman et al., 2015) it is noted that the ‘utility’ of a financial education curriculum relies, among other things, on whether it *“provide[s] suggestions to differentiate instruction, exercises, and activities designed to support engagement among a diverse population of students? (e.g., variability in race/ethnicity, gender, income, special education status, and English-language proficiency)”* (p. 55).

In fact, this exact sentiment was reflected in several interviews when the interviewees – a superintendent and three principals – noted the complexity of teaching PFL to a diverse student body in a non-judgmental way, the importance of which is also reflected in interviews of PFL teachers conducted by Tisdale et al. (2013). A delicate balance is required to effectively teach the importance of concepts such as needs and wants and budgeting, without causing feelings of dissonance or resentment among some students.

We asked high schools and middle/elementary school respondents if their PFL curricula addressed the diverse needs of students, and to elaborate if they do so.

At the high school level, 71% of the respondents noted that their PFL curriculum addresses students’ diverse needs to a certain degree, of which half responded that their curriculum addresses those diverse needs “a lot” or “a great deal”. Only one respondent answered that the curriculum does not address students’ diverse needs. The remaining eight respondents answered that they did not know.

At the middle/elementary school level, just over a third of schools that have PFL education answered that their curriculum addresses diverse needs to a certain degree (six respondents). Only three respondents (18.7%) answered that their curriculum does not address students’ diverse needs at all. The rest either did not know or did not respond.

A few of the respondents elaborated in the comment box on how they address diversity. Here are their comments:

“Individual needs are discussed, i.e. college bound, apartment bound, transportation etc.”.

“We discussed wealth gaps by race, ethnicity, and by neighborhood. We also talked about why people with less wealth tend to make more expensive financial decisions.”.

“Our students have very little exposure to financial institutions with this type of gap it takes time to have the students understand how important personal financial literacy is for them. we had quest speakers come in to address our students to make the ‘real world’ connection”.

“Teachers work to explain the ramifications of different starting points based upon family situations”.

In our interviews we had the opportunity to explore this complex issue in a more nuanced way. While many survey respondents and interviewees responded that their PFL instruction does not address diversity per se, several interviewees did articulate very clearly an awareness that PFL education must address the difference in students’ backgrounds and value systems.

In some of the cases, interviewees spoke of diverse needs in the context of addressing poverty. As one principal said:

“as schools have become more diverse, and we have... an increase of people who are refugees and then an increase of poverty, ... I think giving a canned program can't address that. I think... it's gotta be ... a little more differentiated to meet the needs the people in the room” (HS03)

And another:

“I have a 90% high need school. We can do a better job in educating kids about wealth etc. We don't do enough. A better job can be done to break the poverty cycle. Children learn what they see. They don't see parents handling money or balancing checkbooks etc. They learned how to be poor” (EL11)

The unique needs of students who are first or second-generation immigrants also came up:

“I just bank where my mother banked, where my grandparents banked ... those are sort of institutional networks. I sort of equate it to the same thing, that we have to help these kids get into college not because they're not smart and cause they can't do the work, it's all of the networks that are required and all of the understandings of how to fill out this form, and how to do this, and how this works, that's intimidating to people. So that's how I feel about personal financial literacy” (EL07)

Being sensitive to racial diversity in the context of PFL education is particularly challenging. Two interviewees spoke of the danger of imposing “white middle-class values” as part of PFL instruction, particularly in relation to needs and wants and budgeting, while still wanting to convey the value of prudent money management. Their words are brought here in full as they articulate this complex challenge. The first, said by an elementary school principal:

“people prioritize how they spend their money differently. [...] You know, everybody values different things. [...] So, building that up in children takes a long time. And it's hard because I can't push my values onto them. [...] Kids are really absolutist about things. So, I remember when I used to teach “Don't smoke. Smoking's bad”. You would always have like five kids in your class burst out into tears, “My mom smokes, she's gonna die!”... And then you felt bad because you're now creating this judgement. [...] So, it's the same thing when you do financial literacy, [...] with diversity, you have to be really careful about that. [...] So, they may be food deprived but driving a really nice car cause everyone sees your ride. [...] So, you have to be really delicate about choices. Because we all make them. I'm sure that some of them would look at [mine] like, “you buy organic food? Like, what a waste!” But that's a priority to me, you know, I pay for a composting service. Some people might say, “Oh that's a waste of money!” ... we all have things that could be judges, I guess. So, I think that's the most important part of meeting diverse needs. Is being respectful that different people value different things.

At the same time, I think you still have to hold to those standards that kids really understand. Like, it's OK when you have a relationship to push them and say, “Do you need those Air Jordans or do you want them? You need shoes. You need something on your feet”.

But it's better when you have a relationship with children to be able to push some of those things" (EL07)

The second, a Superintendent, described the challenge she faced when implementing a mentorship program in the local high school:

"when you have people coming from professions in financial institutions they're very grounded in their middle class background and values, ... they have a hard time transitioning to understanding that [...] when your finances are such that you're struggling to have your basic needs met, ... talking about savings then almost feels like a judgement. [...] And also, being aware [...] how money is used when you're receiving assistance around food or around rent, and then saying, "Oh, I'm going to buy very expensive shoes". You cannot pass judgement on that. Because this may be very symbolic. [...] Like people will say, you know, "Well, you know, do you need those expensive shoes? You can get other shoes and put that money...". That comes off very much as a values statement...

And so in working ... around safe and supportive schools, becoming a trauma informed community, working with some of our partner non-profit agencies that provide services, ... it became very clear that we were looking at a cultural disconnect that we needed to address. Otherwise the value of the financial literacy curriculum doesn't get transferred. What kids walk away with is this feeling of not having enough and the things that they want are either unattainable or are considered a poor choice by the larger community. [...] It's about creating models and delivery that aren't grounded in white middle class values about how we talk about money. ... And I say that from my position of incredible white privilege, you know?

But then we also want to flip that and say, "But, our purpose should be to create resilient kids". And so, how do we get the kids to a place where they feel empowered and have that resiliency so they recognize that they in fact can, kinda, be in charge of their own destiny when it comes to, you know, financing their education, pursuing further education to achieve their hopes and dreams" (DI01)

Looking at things from a slightly different perspective, one principal spoke of PFL education as a tool to address issues of social justice with students of color:

"...as children reach the middle school years, [understanding of the basics] could really be built upon for them to use as another kind of perspective or set of information to do their social analysis, cause at our school we're all about critical thinking and social analysis. And if you don't understand economics, you're not going to be able to analyze or understand the context that you live in" (ME14)

These responses indicate that, as Tisdale et al. (2013) found, teachers are well aware of the fact that their students are not all the same and that PFL education is not a "one size fits all" type of subject. Certainly, one of the areas that may benefit from additional support is the development of culturally sensitive PFL curricular material. In addition, training in PFL could help teachers to develop techniques

for talking to their students in a way that helps them make the most out of their PFL education, as the principles of equity require.³³

Q1.7. Expected changes in the way PFL is instructed in schools

PFL education in Massachusetts is currently in a state of transformation. The addition of PFL to the History and Social Science curriculum framework, the introduction of the *Act relative to financial literacy in schools*, and recently, the introduction of the Financial Literacy Planning and Implementation Grant, are bound to encourage some districts and schools to make changes in their offering of PFL education. Responses to our survey indicate that many districts and schools are indeed planning to make changes to the PFL instruction in their districts or schools.

School districts

Sixteen respondents, representing almost half of the districts to respond to our surveys, said they are planning some sort of change to the way they teach PFL. Only two districts (6%) reported that no changes in their PFL education were planned. An additional eleven districts (33%) reported that no decision regarding changes in PFL education has been made thus far.³⁴

Of the districts that reported that changes will be made, 13 (81%) are districts that have some PFL education, and a third are districts that already require schools to teach PFL either as a graduation requirement or as an elective (or both).

High schools

Due to the survey format, only schools that reported having some PFL education were asked about planned changes in PFL instruction. Of the 41 high schools that have PFL education, 15 (37%) reported that changes to the current instruction are planned. Of those, eleven schools are not utilizing the History and Social Science curriculum at all (either the 2003 or the 2018), and one additional high school is currently utilizing only the 2003 History and Social Science curriculum framework. It is likely that these schools will move forward with implementing the changes to that curriculum framework.

While none of the respondents said that no changes to PFL instruction were planned, 14 respondents did say that no decision has been made regarding future changes.³⁵

Middle and Elementary Schools

Half of the middle/elementary school respondents that do have PFL education reported that no decision has been made regarding changes in PFL instruction. And while one respondent answered that no changes are planned, only one respondent answered that plans for changes have been confirmed.³⁶ This is not surprising considering that the focus of the PFL related changes in the History and Social Science Curriculum Framework is in the high school level.

³³ We do not include an analysis of the correlation between the rate of students of color in schools and the existence of PFL education because both our datasets of high school PFL courses under-represent schools that have a higher than average rate of Hispanic or African-American students, and therefore the data we have does not accurately represent the total population.

³⁴ The remaining four either do not know or did not answer this question.

³⁵ The six remaining respondents either did not know of changes or did not respond to the changes.

³⁶ The remaining five schools either didn't know or did not respond to the question.

In our interviews, many interviewees from middle and elementary schools did express a desire to continue and even expand their PFL instruction, even if expansion is not yet planned: *“Financial literacy education is not a priority right now though it should be” (EL13)* and *“I think that eventually we would get there [introduce PFL]. [...] I do also believe though that it won’t be with the urgency that we should be getting there with” (ME14).*

Our population of interviewees is self-selective, so it is highly likely that all the teachers and administrators who volunteered to be interviewed did so because they value PFL education in schools. It does seem, however, that in the process of conducting this study we encouraged some educators to give the field more consideration than they had in the past. As one principal told us: *“Even you calling can bring about change. [...] Obviously, there is a need...” (EL11).* And another:

“I wanted to thank you, because I think, sometimes we don’t think about the little things, right? And so, I think before, when you had sent out the first notice about being part of the survey, I really hadn’t given a lot of thought to it. But the more I think about it, it is important for children at a very young age to learn to save” (EL08)

As mentioned, several schools reported using PFL related assignments as part of a project-based learning program. Some other schools mentioned that as their district is promoting project-based learning, this will be a good opportunity to incorporate PFL education.

At the high school level:

“we wanted to sort of move from personal finance to do like a little more project-based stuff and overlay finance into some of the things that we were doing with the other courses. So, students might do some small business things or something like that and then overlay finance” (HS03)

At the middle school level:

“the district is starting an initiative to be more focused on project-based learning where ... they give them problems to solve that are much more open-ended and [they] get to pursue their interest areas. And this has been the primary hook for the seventh grade teachers, who are like “no, I could totally plan a unit right now where we’re talking about personal finance”, because the kids are really interested in that topic” (MI16)

And at the elementary school level:

“We are also, as a school district, moving towards project-based learning, so with that ... we try to create units and assessment that allow students to transfer their knowledge into real life. ...there are a couple of them, that focus on money. So, for instance, there’s one where students are allotted X amount of money and they have to go shopping and they’re given a catalogue” (EL10)

Research Question 2: What conditions shape personal financial education in public schools in Massachusetts?

A central aspect of this study, beyond the mapping of PFL education in the public-school system, is the understanding of the conditions that either hinder or facilitate PFL education in schools. Without a state mandate that obligates schools to teach PFL education, conditions like the availability of funding, guidance, professional development for teachers, curricular resources, and demand from parents and students, can encourage schools to introduce PFL education. These conditions also shape the PFL education offered to students – for which grade levels will PFL be offered? Will all students have access to PFL content? In which subject will PFL be taught? What PFL topics will be covered? Etc.

It is important to understand from educators on the ground what helps or hinders PFL in their district or school. Barriers may be different between districts, schools, or grade levels. For example, it is highly probable that there are considerably more resources available for PFL at the high school level, that some geographical areas may have access to more resources than others, and that district and school administrations may have different perceptions on what helps or hinders PFL education.

We asked all our survey respondents what barriers to PFL education they face. We also asked schools, specifically, about support from community partners and availability of professional development – both elements that can potentially facilitate PFL. In interviews, we explored these elements further to achieve a deeper understanding of how they influence PFL education. Through this exploration, we found community partnerships to have the potential to facilitate PFL education even when other necessary conditions, such as funding and teacher training, do not exist.

Q2.1. Barriers to personal financial literacy education

All survey respondents were presented with a list of potential barriers to PFL education and asked to select the barriers to further advancement of financial education in their district or school.³⁷ Respondents could also add barriers to the list.

Table 17 below details all responses by the different survey groups:

³⁷ Respondents could choose multiple option.

Barrier	District s (#)	District s (%)	High Schools (#)	High School (%)	Mid/ Elem Schools (#)	Mid/ Elem Schools (%)	Total (#)	Total (%)
Shortage of class time	23	69.7%	21	51.2%	32	58.2%	75	58.1%
Lack of vetted curricula	14	42.4%	11	26.8%	21	38.2%	46	35.7%
Lack of funding	20	60.6%	11	26.8%	12	21.8%	43	33.3%
Not enough teacher training opportunities	12	36.4%	11	26.8%	17	30.9%	40	31.0%
Not enough FTEs	Not asked	n/a	15	36.6%	9	16.4%	24	25.0%
Lack of awareness of other teachers or staff	7	21.2%	6	14.6%	12	21.8%	25	19.4%
District/school administration does not prioritize personal financial literacy education	6	18.2%	3	7.3%	15	27.3%	24	18.6%
Not enough available PDPs	Not asked	n/a	3	7.3%	1	1.8%	4	4.2%
Parents or students are not interested in personal financial literacy	2	6.1%	0	0.0%	0	0.0%	2	1.6%
No response	2	6.1%	6	14.6%	2	3.6%	10	7.8%

Table 17

Looking at the responses to all three surveys, some common threads appear. Notably, shortage of class time was cited most often by respondents in all three groups, making it the most prominent barrier to PFL education according to our respondents. Two districts added that testing and additional standards create a burden on teachers and students that limits the ability to supply PFL education. In contrast, lack of interest by students and parents was cited only by two responding districts and not at all by the schools. The obvious conclusion is that there is no issue with demand for the topic to be taught at schools.

There are, however, some interesting distinctions between the different groups of respondents:

- Although shortage of class time was the most cited barrier by all respondents, the share of respondents to cite this barrier varied between groups. Almost 70% of districts saw this as a barrier compared to 51% of high school respondents and 58% of middle/elementary school respondents.
- Lack of funding was cited by over 60% of responding districts making it a close second to shortage of class time. Yet only 21.8% of middle/elementary school respondents saw it as a barrier for them. For high schools, lack of funding was cited by an equal number of respondents, as was lack of vetted curricula and not enough teacher training opportunities (26.8%).
- For middle and elementary schools, lack of vetted curricula is the second most cited barrier, cited by 38.2% of respondents, compared with responding high schools of which 26.8% cited lack of vetted curricula. Districts also saw this as a major barrier with 42.4% of respondents.

- Over a third of high school respondents cited lack of FTEs as a barrier to PFL education making this the second most cited barrier. Yet only 16.4% of middle/elementary schools did so.
- Compared to the percentage of high schools and districts (7.3% and 18% respectively), a considerably higher share of middle/elementary school respondents (27.3%) cited their district/school administration not prioritizing PFL education, as a barrier.
- Only two respondents, one district and one elementary school, said that there are no barriers to advancing PFL education in schools.

Figure 18 illustrates the difference in the prominence of each barrier to the three different groups.

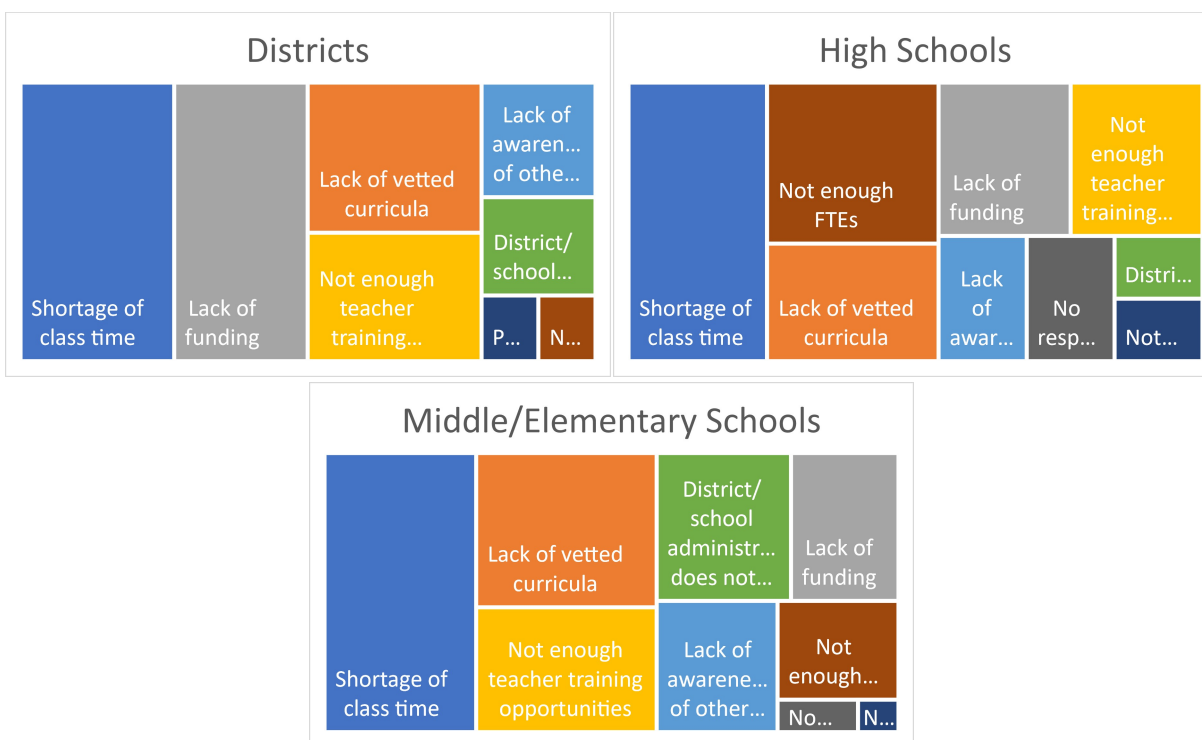


Figure 18

Some of the differences in responses are not surprising. For example, it seems natural that middle/elementary schools are more concerned about the lack of vetted curricula than are high schools that have access to the detailed personal finance standards through the 2018 History and Social Science curriculum framework. The fact the PFL education is more common in high schools might also be the reason more middle/elementary school respondents thought that this education is not prioritized enough, compared to high school respondents and districts.

With regard to the lack of funding barrier, it is important to note that some other barriers could also be attributed to lack of funding. For example, the lack of PFL vetted curricula or lack of teacher training opportunities may well be the result of lack of funding. It may also be that districts are more likely than schools to see other barriers as a funding related issue, which would explain why lack of funding is more prominent among responding districts than schools (60.6% versus 26.8% and 21.8%).

Other differences in responses are harder to explain. In particular, it is unclear why shortage of class time was not as prominent a barrier for high school respondents as it was for districts and even for middle/elementary schools. Perhaps, the ability to offer electives makes class time less of an issue at the high school level.

In the section below, we elaborate on the central barriers as they are reflected in the interviews we held with educators:

Barrier 1: Competing Demands in a reality of limited resources

In interviews, almost all interviewees spoke of being strained with competing educational demands, particularly making sure students do well in MCAS. In essence, it is a question of accountability. Educators consistently expressed their opinion that their performance is measured in MCAS test scores, referring to the Massachusetts' school and district accountability system (The Department of Elementary and Secondary Education, n.d.(c)). Therefore, even though these educators felt that it was their duty to teach real life skills, such as PFL, they were obliged to prioritize whatever curriculum was being tested:

"I mean the biggest driving force at any point is accountability, right? And so, we have curriculum frameworks handed down from the state for mathematics and for history, but we don't have any for personal finance. There's nothing that we're assessed on or held responsible for making sure that the kids leave here with a body of knowledge" (MI15)

"...teachers teach to the test. That inhibits teaching things that would actually influence kids' lives. It's very frustrating. Understand that kids with high school diplomas know these subjects but it's not necessarily used in their lives" (MI16)

"If we really want it to be done in every school, I hate to say it this way, then you have to test it. Because that's what we're judged on, and, honestly, I hate to say it this way, but good test scores are how I keep my job. ... Because now I'm just on a contract. And so, if kids score start going down, I'm gonna lose my job whether I'm competent or not. ... that's the sad aspect when there has to be some level of accountability ... Cause that's how we prioritize time" (EL07)

"For three elementary school years where we have MCAS it prevents us from getting deeper into other subjects. I think that it's no surprise that financial literacy is covered in the framework only for K-2. Why does it leave the frameworks at 2nd grade? Once it leaves the framework it's not taught. We are expected to teach the framework" (EL13)

This issue is particularly salient in schools that serve high needs students, even though these students might benefit most from PFL education as expressed below:

"Given that there's an achievement gap and children, in the context in which we work, are usually further behind from very early grades than their counterparts in more suburban neighborhoods. So, with that there is a focus that I think comes from a good place among educators, of driving home the math content and the reading content. And because of that ... if you introduce a topic or say "we're not doing enough financial literacy in math"... it starts to feel like an add-on and like you're detracting or taking their focus away from what they need

to be doing in order for the school not to become a failing school, a label of a school in need of support or whatever it may be” (ME14)

“Especially in a gateway city, we live and die... you know, we are judged by what test scores say even though we do a lot more than that”. (EL07)

Barrier 2: Limited Resources

Competing demands in education make the allocation of scarce resources consequential to which topics are effectively taught in schools. With the reality that educators are evaluated according to students’ performance in state-wide tests, allocating time or money to activities that are not tested is challenging. The most common scarce resources mentioned by educators are time – both class time and teacher prep time – and money.³⁸

Class time

Shortage of class time was mentioned as a barrier consistently in survey responses and was more likely to be mentioned by middle/elementary school respondents. In the interviews, we heard about difficulties in finding the time to teach PFL in the lower grades:

“I think class time is always hard too because I think that teachers feel a huge pressure to get through all of the standards. And that’s hard to do. Especially when I ask them to do things that are a little bit deeper and go beyond what the standards say. [...] if people aren’t using their time efficiently every single day, it’s hard to get through all of the standards. So yeah, class time is an issue. It needs to be used very carefully” (EL10)

“The weakness is also the same in elementary school – time. ...everything is important, and everything is getting jockeyed for time” (EL07)

“Well there’s a class time constraint because teachers are teaching social studies, science, English, and math during the course of the day, as well as students having specialty classes. And so, there are only so many hours in the day that are available, plus lunch time, recess, you know” (EL08)

At the high school level where PFL electives are the norm, some educators expressed the time constraint in terms of these electives having to compete for students’ time and interest.

“... it was just disposable because students would take classes that were more relevant, and for them relevant was competitive so they could get into college. And then, [the school] specifically is set up where once you hit all those credits, then you took either co-op or some sort of program in the community. And senior year you were gone for half the day” (HS03)

“And so, we only have one Personal Finance and Banking class per semester, so if that conflict with their, say, Italian class, well they’re not gonna be able to take both. They’ll only be able to take the Italian class but they really want to take both. So that leaves me with the feeling that we’re leaving some kids out that really want to be further educated when it comes to financial literacy” (HS0)

³⁸ Few interviewees did not mention funding as a major issue in relation to PFL.

Some schools did manage to find a way around the time constraints to fit their PFL education. We heard from a Superintendent about how the district –

“learned that the month of May, which has now become MCAS May, the kids are doing their testing in the morning according to schedule, [and] in the afternoon, they don't really want to sit down and learn more math or do a reading. Or if they've done a lot of that for over two hours sometimes in the morning, while being assessed, that's a great opportunity to bring in an outside partner who's doing something different. [...] it just really works to hit that time frame. It's a little bit of a scheduling nightmare trying to get the partners in to each of my three elementaries and making sure that we have the sequence there. [...] But that really works” (DI01)

A K-8 school principal told us about PFL instruction that happens “...once MCAS testing is done” (ME14).

Teacher prep time

The time barrier is also reflected in a shortage of teacher prep time. This is very much an issue when considering that teachers must prepare or adapt their PFL curriculum. As teachers are not necessarily trained in personal finance, preparing teaching material can be especially time consuming. We heard from several interviewees that preparing their PFL courses or program requires considerable prep time.

“The project that we did in the third grade took a ton of planning time. And it took some, obviously, some training on the teachers’ part. It took a lot of prep work. So, I think that time is a huge barrier, and it’s always a barrier in schools when you look at doing great things” (EL10)

“If I’m going to introduce an interdisciplinary unit between the social studies, English, math teachers, art, whoever else, they're gonna want time to be together and plan together. And so, we’re going to need to sort of support that from the district level. Of course, the district would need the support of the Commonwealth to do that” (MI15)

One elementary school principal expressed her frustration with not even having the time to create a community partnership that would eliminate the need to prepare a PFL curriculum, by saying “I think part of it is time. I don't have the time, given the scope of my responsibilities as a school leader to reach out to banks to say, “Would you be willing to come to my school and do some sessions with kids” (EL08).

Another elementary school principal described it as “fatigue”: “we have a lot of instructional changes that are coming down this school year. [...] I think you get this fatigue from staff, right?” (EL08).

Funding

Most of the schools we interviewed said lack of funding hinders the development and expansion of PFL education (only two schools said outright that funding is not an issue for them):

“It’s fact of life. But funds go for students to be able to meet graduation requirement. Even though this course is also important, but it’s not looked at a major component for resource allocation” (HS04)

“So if I had additional funding in my school budget that covered more than the papers the teachers are using for copies, or the pencils or the other material we use, one of the areas where I would potentially start to look at is “oh, is there a vetted curricula out there that I could buy around financial literacy”. Unfortunately, the context in which we live, there isn’t any extra funding usually around. There’s not enough finding for the basic materials many times. So yeah, I think funding is definitely an issue” (ME14)

“You know, if your resources need to be allocated to updating and supporting work on the instructional core, that limits your availability of resources to do anything else” (DI01)

FTEs

In the surveys, many schools (particularly high schools) mentioned shortage in FTEs as a barrier to PFL education. Two of the high school educators we interviewed mentioned shortage of teaching staff as a barrier for PFL. A business teacher from a large suburban high school said this:

“I think that, you know, when you have nearly 2400 students in the school it would be nice if we could have, you know, multiple full-time teachers teaching the subject matter which then you could offer the class multiple times throughout the day, which will allow more students to take the class as an elective”. (HS05)

A principal of a rural high school told of the difficulty in finding a substitute to a PFL teacher who left just before the year started: *“And we advertised and could get no one. We ended having a long-term sub teach them” (HS03).*

Barrier 3: No Requirement or Guidance

In the survey, three elementary schools and one K-8 district responded that PFL education is not suited to the age of the children they serve. An additional elementary school said the PFL is *“not in the pacing guide for elementary”*. This view, however, was the minority among our interviewees who, for the most part, expressed that PFL education had its place in the early grades. One high school principal spoke of the need to start PFL education early by saying:

“the timing of it, you know, students possibly should be exposed to this earlier in their academic careers and you know, the senior may not be the most ideal place for it if we’re trying to get this on students’ radar as soon as possible. But for the way our sequence goes with the state standards this is the best fit. So, I’d say, as of right now that’s probably the biggest detractor that maybe the timing in their high school career for it” (HS06).

And yet, even those who responded that PFL should be taught to young children expressed a need for guidance as to what should be taught, when, and how. Almost all PFL education efforts we were told about were the result of local initiatives by the school or by an individual teacher. And while some educators did say that their district is supportive of PFL education without it being a requirement, in many cases, the school is left to figure out PFL instruction by itself: *“There’s the commitment and it’s there, but in the end, you’re still relying on the competency of every teacher teaching it” (EL07)*, and *“The district encourages, it is a thing that’s done in the district but is not dictated. Schools do what they think is appropriate” (EL09).*

Interviewees expressed their view that a top-down requirement is the best way to make PFL education happen:

"if at the state level, financial literacy could be integrated into an existing curriculum around or existing set of standards in math, ... technical reading and technical writing in ELA, or through civic engagement, or through looking at allocation of resources in an existing curriculum, I think that's how you get it actually into the regular school day and not as an add on. As long as it stands outside of the existing set of standards, it is just one more thing and when we're being held accountable and in a very public way, accountable to data in math, and ELA, and science, that's gonna be where we have to keep our focus" (DI01)

"And also, I think if the Department of Elementary and Secondary Education kind of took a stand. Not that they don't necessarily have a stand, but in some way communicated that these assessments and standards and everything else, at the end of the day, are for the wellbeing of a child, so other things shouldn't be, kind of, stripped away" (ME14)

Educators expect that such a requirement would, in turn, come with either guidance or additional resources which would help schools implement PFL education, particularly for young children, without which: *"the ability to tackle this topic formally [is hindered]. [...] A teacher cannot handle this without guidance on what to teach in each grade" (EL13)*

Other elementary school principals expressed similar sentiments:

"I hope that at some point we can get some standards that look at financial literacy, [...] Because ... there's not a domain like financial literacy. ... they're embedded. They're sort of, inherent in a lot of the standards that we teach" (EL10)

"What would be helpful is if the whole concept of the financial literacy component would be more outlined. What does it look like in 1st grade? What activities, aligned with the standards, would promote financial literacy, and then second grade etc. [...]. What would be the end goal for elementary school? And then middle and high school because it is important to know" (EL09)

"If we had additional direction about how a framework would look like for financial literacy it would help. Not even nuanced but just the concepts that should be covered in each grade. I am not a finance person. Not qualified to decide the scope or sequence for financial literacy education for a 5-year-old" (EL13)

"I personally as a principal don't know. I haven't necessarily seen any research on this, about when it's appropriate to start exposing a child to personal finance issues and... when is it appropriate to expose them to the basics versus some of the potential injustices. Because I think those would be two different kind of developmental periods. [...] So more information, I think, would be beneficial in removing the barrier as well" (ME14)

We heard a similar request from the superintendent we interviewed:

"There's already so many things that are priorities that that's where I think we need help. Is this something the state wants to see as a priority? Then we need to have the blueprint and the road map for how do we implement it and how do we implement it well. ... You know, I'm

in a district with 1,400 students. I have nine administrators for my entire district. And they work so hard. They are the hardest working team. But even then, I don't know if we would have the internal capacity to figure this out. We need that kind of lens to come through from the state, to say, "Yes we consider this a priority. We're not gonna just say, here you go figure it out. Here's a road map to how it can be done and how it could benefit you students" (DI01)

Barrier 4: Lack of Intentionality

One way to overcome the time constraint is integrating PFL into other subjects. As one elementary school principal said:

"I don't think that it would be that hard to say to teachers, during your math class ... why couldn't you do a unit on financial literacy? And you could actually connect that to the coins and currency work that already happen" (EL08)

To a certain extent, that is already being done in the elementary school math curriculum. At the same time, many interviewees expressed their concern that PFL integration is not enough, as the principal proceeded to say: *"But I think, in some ways you definitely want that instruction to be really explicit also" (EL08).*

In most cases this was presented as a dilemma – educators are interested in teaching PFL but are finding it difficult to find the resources to do it as a standalone unit. Should they make do with what they can or give up on PFL altogether?

"[PFL is] easy to thread into other content areas. It's easy to give example for math. Or wants and needs in social science. But it's never the driver of the content. It's fine but there is a lack of intentionality, the focus and the goal is not understanding the finances. [...] With a lack of intentionality financial literacy is a vehicle and not the driving force. So, we never know how effectively it's being taught" (EL13)

"... If I think about financial literacy, I don't think about like, "oh is there a full-time educator that can teach this or a specialty teacher that we can fund to teach this". My mind immediately goes in to how can this be embedded in math or in in the social studies classes. Which to me speaks to the topic not being considered important enough, again, for lack of a better word, to actually have someone who could really focus on it, really, you know, look through different curricula and really focus their energy on doing it and doing it well" (ME14)

"[you need to] call some things out to be intentional. For example, in the scope and sequence with the state dictating about money. But maybe if we can teach the concepts [...] talking about how much money people have and the power it can give them. Getting at the aspects, maybe social justice, in terms in wealth and finances. And how our society gets in problems of wealth. Use this knowledge to make society better." (EL11)

As shown in this report, most high schools also integrate PFL topics in a variety of other subjects. One of the high school educators we interviewed described how the school moved from integrated courses to a standalone PFL course to allow more in-depth instruction:

"before ... [in] some of the Math classes we were trying to embed elements of financial literacy in their classes as part of their curriculum. [...] But it just wasn't an efficient way and best way to

get to all students, so that's why we carved out these classes and made it a huge piece of it so that we could go in depth with it" (HS06)

Q2.2. Levers to personal financial education

We asked survey respondents about the conditions that might lever or facilitate PFL education in schools.

- In our surveys, we asked about four specific elements that might facilitate PFL: (1) use of curriculum material; (2) interest and engagement of students; (3) access to professional development and PDP's; (4) receiving support from community partners. We also asked districts what resources they provided schools to support PFL instruction.
- We asked interviewees more generally to describe the things that helped them introduce teach or expand PFL in their districts or schools.

1. Resources provided by districts

We asked the districts who participated in our survey what sort of resources they provided schools to help their PFL instruction. Only five districts (15.2% of respondents) said they did not offer any resources to schools.³⁹ The other 25 districts, including 11 districts that do not require schools to teach PFL, provide at least one type of resource.⁴⁰ Just over half of the districts (51.5%) provide schools with more than one type of resource.

The most commonly cited resource supplied to schools by districts is assistance in developing relationships with community partners. Over 50% of our respondents (19) mentioned this type of support. Almost half of the districts (48%) said they provided schools with some sort of guidance or actual materials related to instruction and assessment. Half of these districts provided more than one resource in this category. Just over a third of the districts (39%) said they provide funding for schools for the purpose of PFL education.

With regard to professional development, ten districts said they provided teachers in their district with training resources to develop or teach PFL. Only five districts, however, said they provided PDP's for teachers who participate in such training.

Figure 19 shows the complete list of resources and the number of districts that provide them.

³⁹ These districts did not add any other sources they might have provided.

⁴⁰ Three districts did not respond to this question.

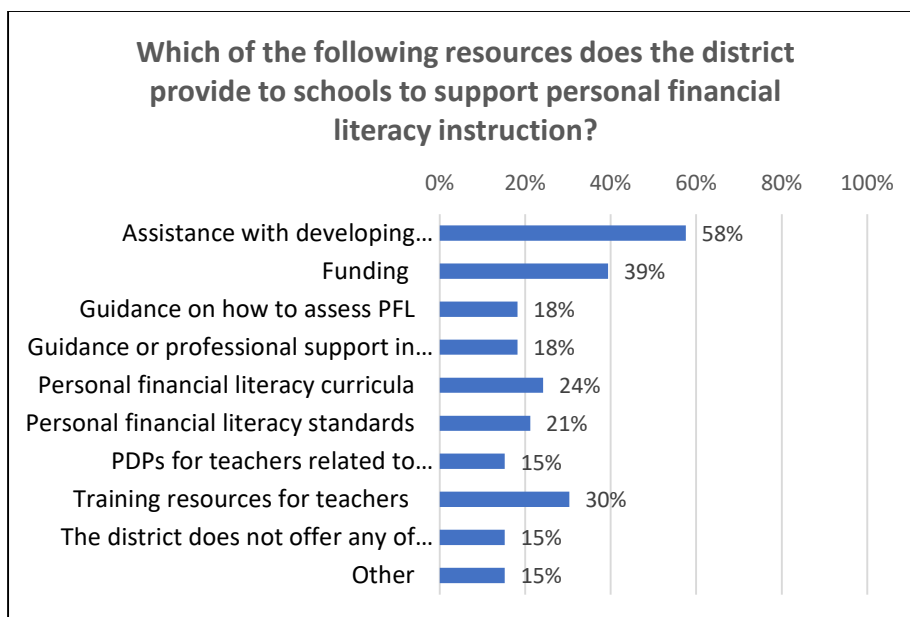


Figure 19

2. Teacher training and PDPs

Research has shown that teachers need training in order to feel comfortable teaching PFL (Way & Holden, 2010). This is not surprising considering that, unlike other subjects, teachers are unlikely to receive any academic training in PFL. Furthermore, teachers may be struggling with their own personal finances and might feel uncomfortable or incompetent in teaching the subject to their students. Having opportunities to participate in teacher training in PFL – be it related to teaching the subject or to teachers’ own PFL – can be enormously helpful in facilitating PFL education.

Professional development is not limited to training and can also take the form of activities designed to improve PFL instruction, such as peer coaching, peer assistance, and curriculum development (The Department of Elementary and Secondary Education, 2017b). These sorts of activities were found to be extremely helpful to schools which participated in the financial literacy pilot program initiated by DESE in 2014-2015 (UMASS Donahue Institute, 2015).

The availability of Professional Development Points (“PDP’s”) for participating in professional development related to PFL can also facilitate PFL education in schools by incentivizing teachers to participate in PFL related professional development, which is essential to teaching this subject.

We asked the schools who participated in our surveys and those we interviewed whether teachers in the school participated in teacher training related to PFL in the past three years. For schools who answered in the affirmative, we also asked whether PDP’s were available for these trainings.

High Schools

Just under half of high school respondents that have PFL instruction participated in PFL related professional development. In most of the cases, the professional development took the form of activities to improve PFL instruction. Also, in over half of the cases teachers received PDP’s for participating in the professional development. In all the cases where teachers participated in training to

improve their own personal financial literacy, PDP's were awarded. Only a few of the teachers who participated in other activities to improve PFL instruction received PDP's for that professional development.

Middle/elementary schools

The vast majority of middle/elementary respondents – 81.3% (13 respondents) said that teachers in their schools did not participate in any professional development related to PFL. Only three respondents said that teachers had participated in any PFL related professional development. This response may indicate several different things: a shortage of professional development related to PFL education in younger ages; middle/elementary teachers have limited capacity to participate in PFL related professional development; or a lack of awareness on behalf of middle/elementary school teachers of professional development opportunities related to PFL.

In our interviews, half of the interviewees from middle/elementary school cited the importance of teacher training for PFL education, implying that it was not always available or utilized:

"I think teacher training is a barrier. Just making sure that the teachers are supported and have the tools to teach students these skills. Because it would be something new. It's not, currently, super explicit in the standards so I think if we were to go beyond, like we did in the third grade, I think it would take some training and that's always a barrier too" (EL10)

"in general, whenever we're rolling out new concepts, new curriculum, right? New expectations, the teachers typically want specific training" (EL08)

"Absolutely need training. Some people are good at that. Some aren't. ... Would have to look which teachers actually need it. Look at budget etc." (EL11)

"I think educators being professionally developed. And also professionally developed around how financial literacy can be kind of the driver of engagement" (ME14)

Some interviewees did mention that PFL training was made available to them. Regardless, PDPs for PFL teacher training were rarely mentioned as something that would contribute to PFL instruction. As one elementary school principal put it when talking about PFL training she received in the past: *"most of us have way too much PDPs anyway. But yes, we probably could have submitted it, now that I'm thinking about what we did. But we didn't" (EL07).*

3. Community partners

As mentioned earlier, the resource districts most often reported they provided to schools was assistance with establishing connections with community partners. Indeed, having the support of community partners can be instrumental to a school's ability to provide PFL education to students.

Most of our high school respondents who have some PFL education reported some sort of support from community partners (63%). Supplying material or speakers and assistance with curriculum development were the most common types of support reported (reported by 31.4% and 25.7% of respondents, respectively). This is followed by teaching classes (reported by 20% of respondents) and teacher training (reported by 14.3% of respondents). Only 4 respondents (11.4%) reported receiving direct funding from community partners. One of the high schools also reported that a bank opened a

branch on the school campus. Many of the schools reported receiving more than one type of support from their community partner.

Of middle/elementary school respondents, only six reported receiving any support from a community partner. The support was by teaching classes or supplying material and speakers. Unlike the high school respondents, none of the middle/elementary schools reported receiving support for curriculum development and none reported direct funding. Only one school reported receiving teacher training. Lastly, one school reported that their community partner opened a bank account for each student with a \$5 deposit.

In our interviews, three high schools, three elementary schools, and one district described utilizing partnerships to facilitate their PFL education. An additional elementary school principal told us about a strong community partnership at a previous school where she worked. Interviews revealed how community partnerships can provide schools with the support to overcome almost all the barriers mentioned by schools and districts, as described below:

"You know, to just make assumptions that teachers are going to know how to do this, and do it well, when they already have such an incredible burden, especially in under-performing districts, to raise scores, to raise achievement... Let them do what they do best, by bringing in the financial knowledge from outside community partners and letting those people bring their expertise in. And that's why it worked. If I had tried to implement a financial literacy curriculum as a direct component to the existing instructional core, I don't think it would have gotten done." (DI01)

"And then we did get a lot of support from [our partner] especially. You know, and they're sharing their materials, [...] [our partner] really, even their upper echelon knows that the relationship with the schools is really important" (EL07)

"I hadn't thought about it actually until this conversation, of how valuable that partnership that I had in my other school was. Even in high school, I remember being a student and having the partnership with the local bank" (EL10)

"there was a partnership with [ABC] Bank, they have been a huge supporter of our district and we rolled out [curriculum] as part of 21st century programming, which is grant funded to expose students to, you know, relevant issues of financial literacy" (HS06)

"we would have done very minimal without outside support" (MI16)

4. Local initiatives and resiliency

We have described extensively how local initiatives, especially in the lower grades, can produce PFL programs without institutional support. Educators' commitment to PFL, their creativity, and their resiliency are some of the strongest factors in facilitation of PFL education.

In our interviews we heard about the importance of the teaching component:

"Teachers care passionately about the whole child. They understand the importance of teaching to the whole child and not the test" (MI16)

"I think the teachers are committed to raise healthy, successful citizens. So, they look for those opportunities to expand beyond just the frameworks to concepts that we all feel like we would have benefited from or did benefit from learning when we were going through school" (MI15)

In addition, our interviews reveal the extent of initiative and ingenuity local educators exhibit to be able to provide PFL education. Here are a few examples.

- **Securing funding:** *"Teachers have been creative at looking at grants, free components, following the markets online, software" (HS04)*
- **Utilizing other requirements to promote PFL education:** *"... [the PFL component] was not a mandated requirement, it was something that kind of naturally was developed in partnership with the creation of the civics component which has become a major theme and kinda thread of the new state standards" (HS06)*
- **Obtaining curriculum and teaching materials:**

"...selecting books, and most of us bought them with our own money. But they're used. So, I would say that we kind of did it ourselves. ... the district didn't provide training" (EL07)

One middle school principal recounted how she salvaged PFL textbooks that were thrown out by another school to use for her middle school students:

"[The district] bought it and sent staff to train for the whole day and they got PDPs. They never used the curriculum, since then (8 years ago) because they never got it. [...] This past year I was told that one of the high schools that had it was throwing out. So, I pulled all of the curriculum out from their trash. For three grades to have their own material, 300 books" (MI16)

Research Question 3: What are the perceptions of district and school staff and teachers of personal financial education in Massachusetts public schools?

This study provided a unique opportunity to hear directly from educators about what they think of PFL education and of the role of schools in providing it. We started with looking at student interest and engagement, and then moved to asking educators of their own opinions on this matter.

Q 3.1. Student engagement with PFL

In the surveys we asked educators to estimate to what extent PFL material was relevant to their students' lives (in the higher grades) or whether students showed interest in the material (in middle/elementary school grades).

The vast majority of high school respondents (83%) said they think that PFL content is highly relevant to their students' lives and not one of the respondents said that PFL content was not relevant to students. Most middle/elementary school respondents said that students were highly or moderately interested in PFL (69%).

Most of the interviewees also said that students were engaged and interested in the PFL content taught to them, understanding the value of PFL to their lives even in younger age groups. A K-8 principal attributed kids' interest in PFL to their understanding that *"this is a very relevant topic that impacts lives"* (ME14). A dean of social science in a high school that recently introduced a PFL requirement told us:

"some students don't find everything relatable and applicable to them. I think this has been a joy to see how students are responding and to this curriculum. [...] we were worried about some pushback with it [adding the requirement]. But the students have been very receptive, and they definitely find its use. And you know, in what they need to become contributing members of society". (HS06)

A middle school principal told us:

"I would say the kids are pretty engaged, especially, I think, more engaged in the conversation when it's talking about credit cards. ...I have been walking through the classrooms and you hear kids talking about and asking questions about, that it's OK to buy something on a credit card but if you pay it off by the end of the month, you know. [...] when I walk through there's always a few kids who are being really vocal about that, questioning, which is good cause then it, kind of engages the other kids in what's the point here" (MI15)

And an elementary school principal told us that:

"both of the first-grade teachers did feel that the presentation was great, and the kids really started to think about saving money after the presentation. But I always wonder, is it that the students weren't thinking about it before that? Because it could be that this is something that the kids have thought about, but they weren't engaged in conversation about it, right?" (EL08)

Students seem most engaged with experiential activities that give them a hands-on experience, such as Credit for Life fairs, which were mentioned as successful programs by the two of the high schools we interviewed as well as a middle school. Here is one example:

"I find the most engaging ways with the students is to do hands on activities. Where we build things using google sheets, such as calculators and budgets, and using charts to analyze" (HS05)

While most interviewees told of high levels of student engagement, we also heard of a lack of interest from students when PFL is taught in a generic way that does not address students' reality. Two interviewees, in observing that PFL education should address unique needs of a particular student body, told us of cases where a non-responsive curriculum resulted in low student engagement. One high school principal told us of the PFL course in the school:

"But it was a program that over time just continued to shrink. I mean, I think the interest wasn't there because the relevance wasn't there" (HS03)

Speaking of a mentorship program that failed due to mentors coming from middle class backgrounds, mentors having trouble understanding students' socio-economic backgrounds, and a generational gap, a superintendent told us that:

"The [...] curriculum, well, it's delivered to adolescents, seventh, eighth, and ninth graders. So, it's hard to get them to believe in adults providing them anything... that they can learn anything from an adult" (DI01)

In addition, as mentioned earlier, student interest also diminishes when courses do not offer an AP or Honors option.

Q.3.2. Importance of PFL to students

All of our interviewees acknowledged the importance of PFL education for students at all grade levels. As one middle school principal put it: *"Everybody needs financial literacy. Unless you're in jail for life. But even in jail there is a little cash flow. And it's the one thing we don't teach" (MI16).*

Many interviewees expressed concerns about students' lack of knowledge and understanding of personal finance. Particularly with regard to younger kids, educators feel they have a poor understanding of the value of money and, therefore, the importance of budgeting and saving:

"kindergarteners especially, well actually even up to fourth, we still confront a lot of misconceptions about where money comes from. [...] you ask them where food comes from - Market Basket; you ask them where money comes from - the ATM machine. [...] when we were kids, we had money ... you earned money, it was very tangible. [...] these children don't have that experience because so much of what we do is unrelated to the value of what they're spending" (EL07)

Most of our interviewees indicated that major gaps in the understanding of personal finance topics seem prevalent in older kids as well, mainly in relation to budgeting, credit, and to the stock market:

"...7th and 8th graders and I would say how very little knowledge ... for example they don't know what the stock market is. They don't really have a sense of like, what's a decent annual salary, or kind of the median... They're really not informed at all what the interest rate etc." (ME14)

"I think it was really eye opening to see how deficient students were in the financial literacy realm so that was really one of the specialized reasons why we decided to create this course" (HS06)

"You know, the students who are often, you know, easy prey to high interest rates or credit card applications at, you know, colleges" (DI01)

The unanimous support for PFL education is unsurprising when we consider that all our interviewees had volunteered to be interviewed. There were slight differences, however, in what interviewees thought was most valuable in PFL education and the extent to which they felt an urgency to provide quality PFL education in their schools. The prominent themes we identified are listed below.

High schoolers gain practical knowledge as they prepare for adulthood

"For a lot of student who are coming to the employment market don't get what minimum wage means. Don't know about deductions. The curriculum in high school very important" (HS04)

"The reasons people need to know about personal finance is problems people have with credit, problems people not understanding how interest actually works". (HS03)

Learning practical real-life skills is important for young kids as well

"Some adults are terrible at budgeting because they haven't learned to do it. It's important to teach kids to do it because everyone has to do it as adults" (EL09)

"The students, I believe, are naturally drawn to this, because this is a very relevant topic that impact lives" (ME14)

"We're finding that the students who are going to the two-year college, ... or directly into the world of work, or into the military, really need to get some financial management understanding. So that way they're thinking about what do you already have? What are you going to have, based on your employment whether it's part-time or full-time? And how do you build capital, and credit history, and a credit score, and all of those things that, just before they leave us, at least they will have had some skill development and knowledge" (DI01)

PFL education is a tool to protect their student from the dangers of the real world

"But the fact that there [is a] crisis in this country, it comes from the fact that it's easier to prey on people because they don't understand how a lot of these things work" (HS03)

"you know, and we're all one catastrophe from bankruptcy" (EL07)

"I think it's still important for kids to understand the value of money so that they can understand what they need to have in order to be able to take care of themselves, right?" (EL08)

PFL education is a tool to increase social mobility for low-income or immigrant students

"So these all kind of lead into why I think it's important, especially in a gateway city, that if you don't have access to those networks you can be the smartest, hardest working person in the world but you might really not get all you want out of life financially if you don't have this understanding" (EL07)

"But then we also want to flip that and say, "But, our purpose should be to create resilient kids". And so, how do we get the kids to a place where they feel empowered and have that resiliency so they recognize that they in fact can be in charge of their own destiny when it comes to financing their education, pursuing further education to achieve their hopes and dreams". (DI01)

PFL education is an issue of social justice

"we have a math educator in the middle school, who ... kinda goes all out, for lack of a better word, in teaching what she thinks is most important, which is financial literacy. [...] because this specific educator believes finances are kind of at the core of social justice and social justice issues. And she believes the children should be armed with this education" (ME14)

In the lower grades – schools have a crucial role school to teach PFL to kids as they are not learning the principals of PFL at home

“the kids are really interested in that topic, ... a lot of kids don’t have that conversation with their parents or wouldn’t feel comfortable bringing it up. And so, school is a safe way for them to start to explore that. And like, everyone knows that money is a thing and can be an issue in families” (MI15)

“it’s imperative that we teach, you know, urban kids who may not...[learn these things outside of school]” (EL07)

“But the more I think about it, it is important for children at a very young age to learn to save. And I was kinda going back in my own memory, I’m almost 60 years old, and I’m just remembering as a young child having, like, my grandparents talking about, you know, saving, and you have your piggy bank, and the excitement of going to the bank and opening your first savings account and having your savings pass book. And wondering how frequently the students that attend my school have had that opportunity” (EL08)

PFL works well for project-based learning and can increase engagement with other subjects and standards.

“I personally think that sometimes the way that you get better results on standardized test is actually by making the content more relevant to children. And finances, and financial literacy to me seems like a natural fit. [...] So, I think for example, when this educator, after MCAS, does a lot of teaching around personal finance I think she is hitting standards. It’s just kinds not in a schedule of standards, kind of the linear fashion that you’re supposed to hit those standards in order to make sure that you’re covering everything that’s gonna be assessed for that specific grade that year” (ME14)

“this project based learning, as a district initiative at this point, which is a really welcome opportunity in the teachers mind to look beyond just the minimum expectations or the push to cover material, and to actually feel an impetus to dig deeper, taking the concepts and really move through it maybe at a slower pace or more thoroughly to cover different aspects of it, knowing that might mean that other bits of knowledge aren’t gonna necessarily get covered in that school year, but you feel like you are providing kids with a basic knowledge that’s gonna be important for their moving forward in life” (MI15)

PFL works well with their district’s emphasis on teaching real life skills:

“I know for a fact that the priority of the district is to teach skills for real life transfer, and financial literacy is 100% real life transfer. So, you know, I can’t say with certainty, but I would imagine we would be able to more things that would teach financial literacy because it’s a meaningful life skill” (EL10)

D. Conclusion

In recent years there is an increasing consensus that personal financial literacy should be taught at schools. The world of personal finance is increasingly complex and adequate personal financial literacy can have profoundly positive outcomes to the well-being of individuals as well as the general public. Yet studies and testing have shown that financial literacy in youth is low and young people are not adequately prepared for the financial decisions they will have to make as adults.

As many as 24 states in the US introduced PFL mandates (Council for Economic Education, 2020), meaning that schools are required to teach or offer PFL courses to high schoolers. As of yet, Massachusetts does not have a PFL mandate, but Massachusetts Financial Literacy Task Force, appointed by Treasurer Deborah Goldberg, established a goal that *“every student who graduates from high school in our state should have a foundational knowledge of financial education concepts and have access to high-quality resources. K-12 students must be financially literate to make informed choices to enhance their own – and ultimately their families – financial security and well-being”* (Financial Literacy Task Force (2015), p. 23).

The purpose of this study is to map out PFL education in the Massachusetts public school system and examine which conditions that can help further facilitate PFL education in schools. The study explored PFL education in all grade levels under the assumption that PFL can start in elementary school. Particular attention was given to the point of view of educators in the district and school levels.

The study utilized a mixed methods structure, using quantitative data obtained through surveys and secondary sources and qualitative data gathered using surveys and interviews. The three research questions guiding the study were:

1. What personal financial literacy content is taught in Massachusetts public schools?
2. What shapes personal financial education in public schools in Massachusetts?
3. What are the perceptions of district, school staff, and teachers of personal financial education in Massachusetts public schools?

Starting from the third research question, our study found that as a whole, educators seem to support PFL education in schools. The vast majority of high school survey respondents said that PFL was highly relevant to their students' lives, and most of middle/elementary school respondents said that students were highly or moderately interested in PFL (69%). Qualitative data collected in interviews supports these findings. Interviewees described what they see as deficiencies in their students' understanding of basic PFL topics and expressed concern that the modern world does not have enough opportunities for kids to learn PFL themselves. Most of our interviewees also said they felt students are engaged with PFL and are interested in learning PFL.

Many educators we spoke to described PFL education as an effective tool to empower their students and help them improve their situation. However, our conversations with educators in all grade levels revealed that to be truly effective, PFL education requires attention to the diverse needs of their student body. Teachers regularly adapt PFL curricula to the needs of their students. Furthermore, PFL educators tread a fine line not to impose white, middle class values while still conveying to students the value of budgeting and prudent money management.

With regard to the first research question, findings indicate that PFL education is highly prevalent in high schools, with 85%-95% of high schools offering some PFL education, and more than 90% of them doing so through multiple courses. In addition, more than half of the schools for which we have data offer a standalone PFL course.⁴¹ However, PFL courses are rarely required for graduation. Only 15% of responding districts require PFL for graduation and around 12% of high schools require students to complete a PFL course.

PFL education seems to be less common in grades K through 8. The Mathematics and History and Social Science Curriculum Frameworks include some PFL topics for grades K through 8, most notably, introducing money and earning an income for grades K to 2. While it is highly likely that most elementary schools follow the curriculum frameworks, thus exposing younger students to some PFL topics, PFL instruction is sporadic and more often than not lacks intentionality. Qualitative data does suggest, however, that schools have an array of local, informal initiatives, partnerships with local credit unions, banks, and non-profits, and experiential activities, through which students are exposed to PFL topics such as budgeting, wants and needs, and saving.

PFL topics most often referenced in high school courses include saving and investing, banking, credit, and budgeting. There is significantly less reference to the topics: fraud, identity protection, and charitable giving. Grades K-8 seem to focus most on introducing money, earning and income, wants and needs, budgeting, and saving.

The most prominent barrier to PFL seems to be a shortage of class time, which is linked to the sense of competing demands. 58% of all survey respondents noted shortage of class time to be a barrier to PFL. In interviews, educators consistently expressed that, while they believe PFL education is important, their performance is measured by MCAS test scores, thus incentivizing to “teach to the test”. The pressure to perform well in MCAS seems intensified for schools that serve high needs students.

Other limited resources prominently mentioned as barriers to PFL are lack of vetted curricula (35.7% of survey respondents); lack of funding (33.3% of survey respondents); and lack of FTEs (25% of survey respondents). Another prominent barrier mentioned by survey respondents is a lack of teacher training opportunities (31% of survey respondents).

Qualitative data adds more dimension to these barriers. Many educators spoke not only of a shortage of class time, but also of limited teacher time, which is required to prepare PFL curricula and activities. The time pressure on teachers is linked to the limited availability of vetted curricula, particularly in the early grades, and to the lack of teacher training in PFL (less than half of high school respondents and less than 20% of middle/elementary school respondents reported to have had PFL teacher training). Educators, mostly in the elementary and middle school, noted a lack of guidance from the state or their districts as to how and when to teach PFL. Finally, interviewees expressed a concern that as PFL tends to be integrated into other subjects there is danger of a lack of intentionality in PFL instruction which can reduce its effectiveness.

Looking at the conditions that contribute to more PFL education, most respondents and interviewees emphasized the value of community partnerships. Support from a community partner can

⁴¹ As we have no data on 38 schools from the 146 schools in our sample, it is possible that the actual rate of high schools to offer a standalone course is less than 50%.

bridge many of the barriers mentioned above. Most notably through direct funding, providing quality PFL curriculum, or instructing students in PFL. Indeed, when asked about the support they offer schools in relation to PFL education, districts most commonly cited assistance with developing community partnerships (57.6% of survey respondents).

Also commonly mentioned in interviews is the importance of teacher training opportunities, as teachers are usually trained in PFL and may experience insecurity teaching PFL. PDP's can be useful not only in incentivizing providing teachers to attend training in PFL, but also in encouraging collaborative work to improve PFL instruction. Finally, local resiliency and initiative was found to be instrumental in providing PFL to students, particularly in the lower grades where less PFL related guidance and resources exist.

The state of Massachusetts has seen dramatic changes in the world of youth PFL education with the recent PFL legislation, the introduction of a PFL elective for high schools in the revised History and Social Science Curriculum Framework along with the resources provided by DESE to support it, and the Financial Literacy Planning and Implementation Grant. These developments are bound to further encourage and incentivize districts and schools to introduce PFL education or expand current initiatives. And indeed, our study indicates that there is an interest among educators to include PFL in their curriculum. However, there still exist barriers to PFL that need to be addressed for more schools to be able to provide such education to students. While some of these barriers cannot be easily overcome, there are a few things that can be done in the shorter term. A clear indication to educators that PFL education is important and should be incorporated into the classroom; guidance into how PFL can be taught in earlier grades; teacher training opportunities; and assistance in creating quality community partnerships are a few measures that may be considered.

On a final note, we would like to stress that this study was conducted in the years 2018-2019, well before the Coronavirus outbreak and does not reflect the deep impact that the pandemic had on the school system. Nevertheless, we believe that this study remains relevant and can be helpful in designing policies for when things return to normal.

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